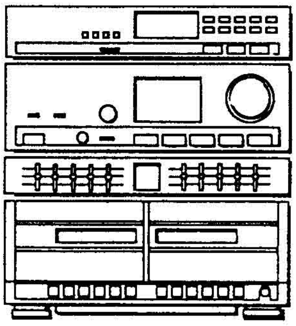
S/M Code No.89-074 DATE OF ISSUE 8/1989-I

AIWA®

CX-75
CP-75



STEREO SYSTEM

SERVICE MANUAL

- BASIC TAPE MECHANISM : TN-21ZFW (E,Z)
  TN-521ZSW (E1,K)
- TYPE. E,K,Z

SYSTEM	CASSEIVER	SPEAKER SYSTEM	REMOTE CONTROLLER	TURNTABLE	CD PLAYER
X-75 K Type	CX-75	SX-705	RC-T75F	PX-E75	※3 DX-M75 (OPTIONAL)
CP-75 E Type	CX-75	※1 SX-705	RC-T75F	※2 PX-E75	※3 DX-M75 (OPTIONAL)
CP-75 E1 Type	CX-75	※1 SX-705	RC-T75F	※2 PX-E75	※3 DX-M75 (OPTIONAL)
CP-75 Z Type	CX-75	※1 SX-705	RC-T75F	※2 PX-E75	※3 DX-M75 (OPTIONAL)

※1 CP-75 does not have SX-705.

※2 As to the service information of PX-E75.
See The individual service mamual of PX-E75/E45.

※3 As to the service information of DX-M75.
See The individual service mamual of DX-M75/M76.

AIWA Co., Ltd.
Tokyo Japan
Printed in Japan

SPECIFICATIONS

Receiver	**CX-75E, E1, K, Z**
Power source	CX-75E, E1, Z 220V, 50/60Hz CX-75K 240V, 50/60Hz
Power consumption	210 W (system total 215 W)
Power output	38 W+38 W (6 ohms+16 ohms total, EIAJ, 1 kHz) 30 W+30 W (6 ohms+16 ohms total, T.H.D. 1%, 1 kHz)
Frequency response	NORMAL tape: 40–12,500 Hz CrO2 tape: 40–14,000 Hz (PB only) METAL tape: 40–16,000 Hz (PB only)
Signal-to-noise ratio	58 dB (NORMAL tape, DOLBY NR ON, JIS–A)
Frequency ranges	FM: 87.5–108 MHz MW: 522–1,611 kHz LW: 144–290 kHz
Antenna	FM: 75 ohms MW/LW: Loop antenna
Wow & flutter	0.17% (WRMS)
Output terminals	SPEAKERS: 6 ohms+16 ohms HEADPHONES: 8–32 ohms
Input terminals	PHONO: 220 mV/47 k ohms VCR/AUX: 150 mV–550 mV/47 k ohms CD: 250 mV/47 k ohms
Dimensions	360(W) × 335(H) × 332(D) mm
Weight	7.7 kg

Speaker	**SX-705**
Type	2-way Bass reflex type
Speaker	Woofer 170 mm cone type Tweeter 50 mm cone type
Impedance	6 ohms
Allowable maximum input	40 W
Dimensions	255(W) × 430(H) × 170(D) mm
Weight	3.5 kg

- Design and specifications are subject to change without notice.
- Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.
- "Dolby", the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

IC DESCRIPTION

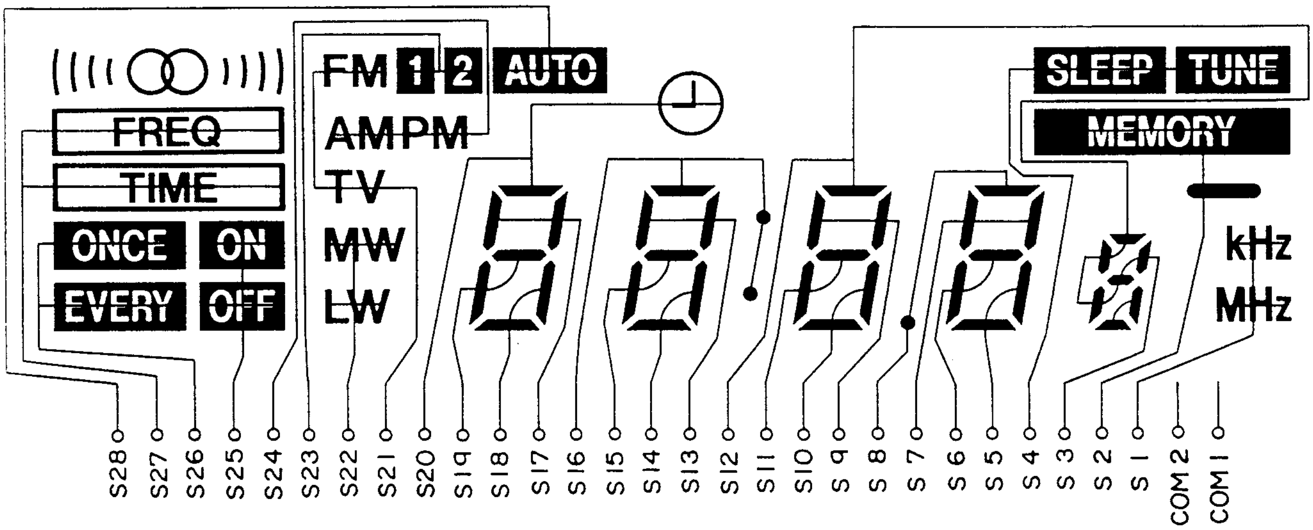
IC, LC7230 – 8239

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1
80</td><td>X IN
$\overline{\text{X OUT}}$</td><td>–</td><td>A 4.5MHz crystal oscillator is connected to these pins.</td></tr>
<tr><td>2
79</td><td>TEST2
TEST1</td><td>–</td><td>Test terminal connected by GND.</td></tr>
<tr><td>35~32
4
3</td><td>KI0~KI3
KI4
KI5</td><td>I</td><td>Key inputs.</td></tr>
<tr><td>5</td><td>REMOCON</td><td>I</td><td>Remote control serial data input.</td></tr>
<tr><td>6</td><td>POW SW</td><td>I</td><td>Power on/off control input. Controls POW CONT at pin 12.
Power is turned on and off every time "H" is input.</td></tr>
<tr><td>7</td><td>$\overline{\text{AUX}}$</td><td>O</td><td><table><tr><th>TUNER</th><th>CD</th><th>PHONO</th><th>AUX</th><th>TAPE</th></tr><tr><td>H</td><td>H</td><td>H</td><td>L</td><td>L</td></tr></table>* ⑦ is not used (H, U, C)</td></tr>
<tr><td>8
9
10</td><td>$\overline{\text{FM}}$
$\overline{\text{LW}}$
$\overline{\text{MW}}$</td><td>O</td><td>Band switching outputs.<table><tr><th></th><th>FM</th><th>MW(AM)</th><th>LW*</th></tr><tr><td>⑧ $\overline{\text{FM}}$</td><td>L</td><td>H</td><td>H</td></tr><tr><td>⑨ $\overline{\text{LW}}$</td><td>H</td><td>H</td><td>L</td></tr><tr><td>⑩ $\overline{\text{MW}}$</td><td>H</td><td>L</td><td>H</td></tr></table>* ⑨, ⑩ is not used (H, U, C) *Only for the E, K, Z specifications</td></tr>
<tr><td>11</td><td>$\overline{\text{FM MONO}}$</td><td>O</td><td>Output switched by the mode switch.
"L" in the FM AUTO mode and when AM "0" is displayed.</td></tr>
<tr><td>12</td><td>POW CONT</td><td>O</td><td>Power on/off control output.
The output is switched between "H" and "L" every time pin 6 (POW SW) goes "H".</td></tr>
<tr><td>13</td><td>$\overline{\text{K. MUTE}}$</td><td>O</td><td>Outputs a muting signal when a key is operated. Active "L".</td></tr>
<tr><td>14
15
16</td><td>CLOCK
DATA
STROBE</td><td>O</td><td>Control signal outputs for the electronic volume IC, TC-9154AP.
When power is turned on, the volume is restored to the position where it was set immediately before power was turned off.</td></tr>
<tr><td>17
18
19</td><td>FUNCTION A
FUNCTION B
FUNCTION C</td><td>O</td><td>Function switching outputs.<table><tr><th></th><th>TUNER</th><th>CD</th><th>PHONO</th><th>AUX</th><th>TAPE</th></tr><tr><td>⑰</td><td>H</td><td>H</td><td>L</td><td>L</td><td>L</td></tr><tr><td>⑱</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr><tr><td>⑲</td><td>H</td><td>H</td><td>H</td><td>H</td><td>L</td></tr></table>When power is turned on, the last function immediately before power was turned off is restored.</td></tr>
<tr><td>20</td><td>T5</td><td>O</td><td>Outputs data to display the function and volume.
The LEDs indicating the function and volume are driven by shift register IC702, TC74HC164AP.</td></tr>
<tr><td>30~27
21</td><td>T0~T3
T4</td><td>O</td><td>Key scan outputs.</td></tr>
<tr><td>31, 73</td><td>V_{DD}</td><td>–</td><td>Power supply pins.</td></tr>
<tr><td>22</td><td>CK</td><td>O</td><td>Outputs a clock signal to the IC, TC74HC164AP (shift register) which drives the function and volume LEDs.</td></tr>
<tr><td>23</td><td>$\overline{\text{C}}$</td><td>O</td><td>Output obtained by inverting FUNCTION C at pin 19. TAPE LED lighting output.</td></tr>
<tr><td>24</td><td>D2</td><td>O</td><td>MUTE LED lighting output.</td></tr>
<tr><td>25</td><td>D1</td><td>O</td><td>VOL DOWN LED lighting output.</td></tr>
<tr><td>26</td><td>D0</td><td>O</td><td>VOL UP LED lighting output.</td></tr>
<tr><td>36~63</td><td>S28~S1</td><td>O</td><td>Segment outputs to light the LCD.</td></tr>
</table>

Pin No.	Pin Name	I/O	Description
65 64	COM1 COM2	O	Common outputs to light the LCD.
66	$\overline{\text{INT}}$	I	Remote control interruption input.
67	$\overline{\text{HOLD}}$	I	"L" input sets the unit to the HOLD mode. Goes "L" when a power failure occurs and sets the HOLD mode. The unit enters the low current consumption mode in the HOLD mode and can hold the preset stations in memory for a longer time.
68	$\overline{\text{RESET}}$	I	Reset pin. "L" input resets the IC.
69	$\overline{\text{SD}}$	I	Tuning auto scanning stop input. "L" input stops scanning and TUNE lights in the LCD.
70, 71	———	—	Not used.
72	$\overline{\text{STE}}$	I	Input to light the stereo indicator [((O))] in the FM mode. Active "L".
74	FM IN	I	FM local oscillator input.
75	AM IN	I	AM local oscillator input.
76	Vss	—	Connected by GND.
77 78	$\overline{\text{EO1}}$ $\overline{\text{EO2}}$	O	Tuning error outputs. ((78) is not used.)

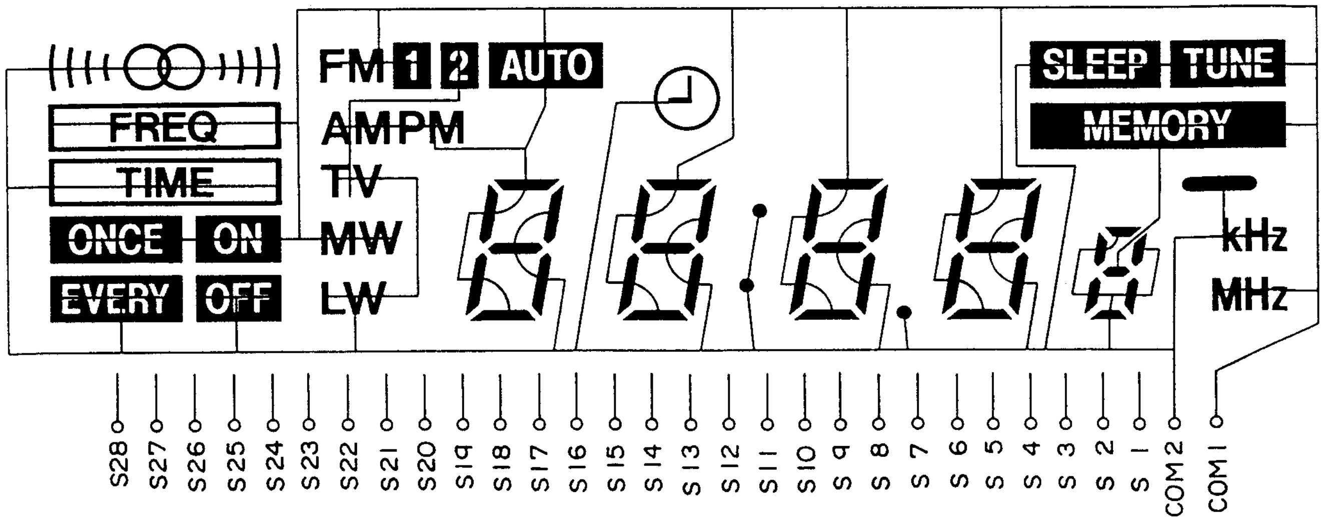
LCD DISPLAY

SEGMENT



FREQ
TIME
ONCE
ON
EVERY
OFF
FM
1
2
AUTO
AM
PM
TV
MW
LW
SLEEP
TUNE
MEMORY
kHz
MHz
S28
S27
S26
S25
S24
S23
S22
S21
S20
S19
S18
S17
S16
S15
S14
S13
S12
S11
S10
S9
S8
S7
S6
S5
S4
S3
S2
S1
COM2
COM1

COMMON



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S11
S10
S9
S8
S7
S6
S5
S4
S3
S2
S1
COM2
COM1

ELECTRICAL MAIN PARTS LIST

=== IC ===

REF.NO.	PART NO.	DESCRIPTION
	87-020-981-010	IC,CX1102
	87-001-350-019	IC,HD14052BP
	87-020-566-019	IC,LA1265
	87-001-654-010	IC,LC7230-8239
	87-020-680-019	IC,NJM2068S
	87-020-758-019	IC,NJM2068SD
	87-027-235-019	IC,NJM4558D
	87-020-966-010	IC,STK4142-2(Z)
	87-001-582-019	IC,STK4152-2(E,E1,K)
	87-020-446-019	IC,TA7343AP
	87-001-655-019	IC,TC74HC164AP
	87-001-476-019	IC,TC9154AP

=== TRANSISTOR ===

REF.NO.	PART NO.	DESCRIPTION
	87-026-165-019	FET,3SK73GR(Z)
	89-501-615-019	FET,2SK161GR
	89-502-415-019	FET,2SK241GR
	89-502-464-019	FET,2SK246Y
	89-503-735-019	FET,2SK373GR
	89-109-521-019	TRANSISTOR,2SA952K
	89-110-155-019	TRANSISTOR,2SA1015GR
	89-209-412-010	TRANSISTOR,2SB941Q,P
	89-309-456-019	TRANSISTOR,2SC945LP
	89-313-834-019	TRANSISTOR,2SC1383S
	89-318-154-019	TRANSISTOR,2SC1815(Y)
	89-318-155-019	TRANSISTOR,2SC1815(GR)
	89-319-233-019	TRANSISTOR,2SC1923(O)
	89-320-011-019	TRANSISTOR,2SC2001K
	89-412-755-010	TRANSISTOR,2SD1275
	87-026-214-019	TRANSISTOR,DTA114YS
	87-026-215-019	TRANSISTOR,DTC114YS
	87-026-366-019	TRANSISTOR,RN1204

=== DIODE ===

REF.NO.	PART NO.	DESCRIPTION
	87-001-811-019	DIODE,1S1885
	87-020-465-019	DIODE,1SS133
	87-020-144-019	DIODE,DBA40C
	87-020-123-019	DIODE,DS446
	87-027-346-019	DIODE,ZENER HZ-11A2L
	87-027-556-010	DIODE,ZENER HZ-11B3
	87-027-393-019	DIODE,ZENER HZ-4C2
	87-027-475-019	DIODE,ZENER HZ-6B1
	87-027-332-019	DIODE,ZENER HZ-6B1L
	87-027-702-019	DIODE,ZENER HZ-6C2L

=== TUNER CIRCUIT BOARD SECTION ===

REF.NO.	PART NO.	DESCRIPTION
BPF101	87-030-105-010	FILTER,BPMB 6A(Z)
C101	*87-018-100-019	CAP,CERA SS 4.7P K 50V SL(K,E,E1)
C101	*87-018-104-019	CAP,CERA SS 10P(Z)
C102	*87-018-134-019	CAP,CERA SS 0.01
C103	*87-018-102-019	CAP,CERA SS 6.8P(K,E,E1)
C103	*87-018-105-019	CAP,CERA SS 12P(Z)
C104	*87-018-105-019	CAP,CERA SS 12P(Z)
C105	*87-018-097-019	CAP,CERA SS 2.2P
C106	*87-018-100-019	CAP,CERA SS 4.7P K 50V SL(K,E,E1)
C106	*87-018-106-019	CAP,CERA SS 15P SL(Z)
C107	*87-018-096-019	CAP,CERA SS 1P
C108	*87-018-119-019	CAP,CERA SS 100P
C109	*87-018-134-019	CAP,CERA SS 0.01
C110	*87-018-134-019	CAP,CERA SS 0.01
C111	*87-010-374-019	CAP,ELECT 47-10V
C112	*87-010-401-019	CAP,ELECT 1-50V
C113	*87-018-116-019	CAP,CERA SS 56P
C114	*87-018-107-019	CAP,CERA SS 18P
C115	*87-018-134-019	CAP,CERA SS 0.01
C116	*87-018-134-019	CAP,CERA SS 0.01
C117	*87-018-100-019	CAP,CERA SS 4.7P K 50V SL(Z)
C118	*87-018-134-019	CAP,CERA SS 0.01(Z)
C121	*87-010-544-019	CAP,ELECT 0.1-50V
C122	*87-014-049-019	CAP,PP 470P
C123	*87-018-108-019	CAP,CERA SS 20P
C125	*87-018-121-019	CAP,CERA SS 150P
C126	*87-014-050-019	CAP,PP 510P
C127	*87-010-405-019	CAP,ELECT 10-50V SME
C128	*87-018-134-019	CAP,CERA SS 0.01
C129	*87-018-134-019	CAP,CERA SS 0.01
C130	*87-018-134-019	CAP,CERA SS 0.01(K,E,E1)
C131	*87-018-134-019	CAP,CERA SS 0.01
C132	*87-018-134-019	CAP,CERA SS 0.01
C133	*87-010-401-019	CAP,ELECT 1-50V
C134	*87-010-382-019	CAP,ELECT 22-25V SME
C135	*87-018-125-019	CAP,CERA SS 330P
C136	*87-010-402-019	CAP,ELECT 2.2-50V
C137	*87-010-402-019	CAP,ELECT 2.2-50V
C139	*87-018-134-019	CAP,CERA SS 0.01
C140	*87-010-405-019	CAP,ELECT 10-50V SME
C141	*87-010-544-019	CAP,ELECT 0.1-50V
C142	*87-010-403-019	CAP,ELECT 3.3-50V SME
C143	*87-010-404-019	CAP,ELECT 4.7-50V SME
C144	*87-018-134-019	CAP,CERA SS 0.01
C145	*87-018-134-019	CAP,CERA SS 0.01
C146	*87-010-401-019	CAP,ELECT 1-50V
C147	*87-018-134-019	CAP,CERA SS 0.01
C148	*87-010-402-019	CAP,ELECT 2.2-50V SME(Z)
C150	*87-010-402-019	CAP,ELECT 2.2-50V SME(Z)
C151	*87-010-401-019	CAP,ELECT 1-50V
C152	*87-010-403-019	CAP,ELECT 3.3-50V SME
C153	*87-014-057-019	CAP,PP 0.001
C154	*87-010-405-019	CAP,ELECT 10-50V SME
C155	*87-010-248-019	CAP,ELECT 220-10V
C158	*87-010-402-019	CAP,ELECT 2.2-50V
C159	*87-010-402-019	CAP,ELECT 2.2-50V
C160	*87-018-195-019	CAP,CERA SS 1200P
C161	*87-018-195-019	CAP,CERA SS 1200P
C162	*87-018-199-019	CAP,CERA SS 3300P
C163	*87-018-199-019	CAP,CERA SS 3300P
C171	*87-018-134-019	CAP,CERA SS 0.01
C172	*87-010-374-019	CAP,ELECT 47-10V
C173	*87-010-263-019	CAP,ELECT 100-10V
C174	*87-018-134-019	CAP,CERA SS 0.01
C175	*87-010-260-019	CAP,ELECT 47-25V
C201	*87-018-134-019	CAP,CERA SS 0.01
C202	*87-018-134-019	CAP,CERA SS 0.01
C203	*87-018-134-019	CAP,CERA SS 0.01
C205	*87-018-134-019	CAP,CERA SS 0.01
C206	*87-018-134-019	CAP,CERA SS 0.01(Z)
C207	*87-018-134-019	CAP,CERA SS 0.01(Z)
CF101	*87-008-261-019	FILTER,SFE 10.7 MA5-A(E,E1,K)
CF101	*82-799-621-019	CF MS2-A(Z)
CF102	*87-008-261-019	FILTER,SFE 10.7 MA5-A
CF103	*87-008-261-019	FILTER,SFE 10.7 MA5-A(Z)
CF131	*82-794-670-019	BFU 450C4N
CF132	*87-008-405-019	CFLZ-450A N
D101	87-027-900-019	VARI,CAP 1SV147
D103	87-027-900-019	VARI,CAP 1SV147
D104	87-027-900-019	VARI,CAP 1SV147

REF.NO.	PART NO.	DESCRIPTION
D105	87-027-900-019	VARI,CAP 1SV147(Z)
D121	81-754-634-019	VARI,CAP KV1260
⚠FR171	87-029-090-019	RES,FUSE 22-1/4W
⚠FR172	87-029-017-010	RES,FUSE 10-1/4W
J20	★81-631-646-019	ANT.,TERMINAL 2P(ANTENNA)
J21	81-754-629-019	CONNECTOR XH M2P(MW/LW LOOP)(E,E1,K)
L101	★81-794-716-019	COIL,ANT 3/4 T
L102	★81-794-717-019	COIL,ANT 2-3/4 SPACE
L103	★82-791-627-019	COIL,ANT 2 FM
L104	★82-702-638-019	COIL,FM
L105	★87-005-151-019	COIL,2.2UH
L106	★82-794-683-019	IFT,FM 6T
L107	★87-007-259-019	COIL,FM OSC (7K)N
L108	★87-006-175-019	COIL,FM(4GANG)(Z)
L109	★87-005-151-019	COIL,2.2UH(Z)
L110	★87-005-151-019	COIL,2.2UH
L121	★87-006-176-019	COIL,MW ANT
L122	★82-794-687-019	COIL,OSC MW
L123	★87-006-177-019	COIL,LW ANT
L124	★82-794-688-019	COIL,OSC LW
L131	★81-631-611-019	COIL,QUAD (SINGLE)
L132	★82-794-697-019	FILTER,ANTI BIRDIE(Z)
L151	★81-631-643-019	COIL,1 POLE MPX
L152	★81-631-643-019	COIL,1 POLE MPX
SFR131	★87-024-174-019	SFR,33K
SFR151	★87-024-171-019	SFR,4.7K
TC101	★87-011-219-019	CAP,TRIMMER 10P VCT
TC102	★87-011-219-019	CAP,TRIMMER 10P VCT
TC103	★87-011-219-019	CAP,TRIMMER 10P VCT(Z)
TC121	★87-011-220-019	CAP,TRIMMER 20P VCT
TC122	★87-011-221-019	CAP,TRIMMER 30P VCT

≡ MAIN CIRCUIT BOARD SECTION ≡

REF.NO.	PART NO.	DESCRIPTION
⚠	87-033-147-019	FUSE CLAMP
C301	★87-018-123-019	CAP,CERA SS 220P(K,E1)
C301	★87-018-126-019	CAP,CERA SS 390P(E,Z)
C302	★87-018-123-019	CAP,CERA SS 220P(K,E1)
C302	★87-018-126-019	CAP,CERA SS 390P(E,Z)
C305	★87-010-400-019	CAP,ELECT 0.47-50V SME
C306	★87-010-400-019	CAP,ELECT 0.47-50V SME
C307	★87-018-127-019	CAP,CERA SS 470P
C308	★87-018-127-019	CAP,CERA SS 470P
C311	★87-010-546-019	CAP,ELECT 0.33-50V SME
C312	★87-010-546-019	CAP,ELECT 0.33-50V SME
C313	★87-010-402-019	CAP,ELECT 2.2-50V
C314	★87-010-402-019	CAP,ELECT 2.2-50V
C315	★87-010-544-019	CAP,ELECT 0.1-50V
C316	★87-010-544-019	CAP,ELECT 0.1-50V
C319	★87-018-117-019	CAP,CERA SS 68P
C320	★87-018-117-019	CAP,CERA SS 68P
C323	★87-018-125-019	CAP,CERA SS 330P
C324	★87-018-125-019	CAP,CERA SS 330P
C325	★87-010-404-019	CAP,ELECT 4.7-50V SME
C326	★87-010-404-019	CAP,ELECT 4.7-50V SME
C327	★87-018-121-019	CAP,CERA SS 150P
C328	★87-018-121-019	CAP,CERA SS 150P
C329	★87-018-129-019	CAP,CERA SS 680P
C330	★87-018-129-019	CAP,CERA SS 680P
C331	★87-010-404-019	CAP,ELECT 4.7-50V SME
C332	★87-010-404-019	CAP,ELECT 4.7-50V SME
C333	★87-010-404-019	CAP,ELECT 4.7-50V SME
C334	★87-010-404-019	CAP,ELECT 4.7-50V SME
C335	★87-010-256-019	CAP,ELECT 0.68-50V
C336	★87-010-256-019	CAP,ELECT 0.68-50V
C337	★87-010-404-019	CAP,ELECT 4.7-50V SME
C338	★87-010-404-019	CAP,ELECT 4.7-50V SME
C341	★87-018-134-019	CAP,CERA SS 0.01
C345	★87-018-131-019	CAP,CERA SS 1000P
C346	★87-018-131-019	CAP,CERA SS 1000P
C349	★87-018-134-019	CAP,CERA SS 0.01
C351	★87-010-406-019	CAP,ELECT 22-50V
C352	★87-010-260-019	CAP,ELECT 47-25V
C353	★87-010-260-019	CAP,ELECT 47-25V
C354	★87-010-384-019	CAP,ELECT 100-25V
C355	★87-010-263-019	CAP,ELECT 100-10V
C356	★87-010-404-019	CAP,ELECT 4.7-50V SME
C357	★87-010-260-019	CAP,ELECT 47-25V
C359	★87-018-134-019	CAP,CERA SS 0.01
C360	★87-010-384-019	CAP,ELECT 100-25V
C365	★87-010-371-019	CAP,ELECT 470-6.3V
C366	★87-010-101-019	CAP,ELECT 220-16V
C367	★87-010-371-019	CAP,ELECT 470-6.3V
C368	★87-018-134-019	CAP,CERA SS 0.01
C369	★87-018-134-019	CAP,CERA SS 0.01
C371	★87-018-134-019	CAP,CERA SS 0.01(Z)
C372	★87-018-134-019	CAP,CERA SS 0.01(Z)
C373	★87-018-115-019	CAP,CERA SS 47P(Z)
C374	★87-018-115-019	CAP,CERA SS 47P(Z)
C375	★87-018-134-019	CAP,CERA SS 0.01(Z)
C376	★87-018-134-019	CAP,CERA SS 0.01(Z)
C377	★87-018-115-019	CAP,CERA SS 47P(Z)
C378	★87-018-115-019	CAP,CERA SS 47P(Z)
C379	★87-018-119-019	CAP,CERA SS 100P(Z)
C380	★87-018-119-019	CAP,CERA SS 100P(Z)
C381	★87-018-119-019	CAP,CERA SS 100P(Z)
C382	★87-018-119-019	CAP,CERA SS 100P(Z)
C383	★87-018-134-019	CAP,CERA SS 0.01(Z)
C384	★87-018-134-019	CAP,CERA SS 0.01(Z)
C385	★87-018-119-019	CAP,CERA SS 100P(Z)
C386	★87-018-119-019	CAP,CERA SS 100P(Z)
C387	★87-018-131-019	CAP,CERA SS 1000P(Z)
C388	★87-018-134-019	CAP,CERA SS 0.01(Z)
C501	★87-010-382-019	CAP,ELECT 22-25V SME
C502	★87-010-101-019	CAP,ELECT 220-16V
C503	★87-010-263-019	CAP,ELECT 100-10V
C504	★87-018-134-019	CAP,CERA SS 0.01
C505	★87-018-134-019	CAP,CERA SS 0.01
C506	★87-010-101-019	CAP,ELECT 220-16V
C507	★87-010-402-019	CAP,ELECT 2.2-50V
C508	★87-018-125-019	CAP,CERA SS 330P
C509	★87-010-263-019	CAP,ELECT 100-10V
C510	★87-010-384-019	CAP,ELECT 100-25V
C512	★87-010-453-019	CAP,ELECT 4700-25V
C513	★87-010-260-019	CAP,ELECT 47-25V
C514	★87-010-384-019	CAP,ELECT 100-25V
C515	★87-010-733-019	CAP,ELECT 3300-42V
C516	★87-010-733-019	CAP,ELECT 3300-42V
C517	★87-010-263-019	CAP,ELECT 100-10V
C518	★87-010-405-019	CAP,ELECT 10-50V SME
C519	★87-010-402-019	CAP,ELECT 2.2-50V
C523	★87-018-121-019	CAP,CERA SS 150P
C524	★87-018-121-019	CAP,CERA SS 150P
C525	★87-010-404-019	CAP,ELECT 4.7-50V SME
C526	★87-010-404-019	CAP,ELECT 4.7-50V SME
C527	★87-010-382-019	CAP,ELECT 22-25V SME
C528	★87-010-382-019	CAP,ELECT 22-25V SME
C529	★87-010-408-019	CAP,ELECT 47-50VX
C530	★87-010-408-019	CAP,ELECT 47-50VX

REF.NO.	PART NO.	DESCRIPTION
C534	★87-010-405-019	CAP,ELECT 10-50V SME
C540	★87-010-405-019	CAP,ELECT 10-50V SME
C561	★87-018-115-019	CAP,CERA SS 47P(Z)
C562	★87-018-115-019	CAP,CERA SS 47P(Z)
C563	★87-018-119-019	CAP,CERA SS 100P(Z)
C564	★87-018-119-019	CAP,CERA SS 100P(Z)
C565	★87-018-134-019	CAP,CERA SS 0.01(Z)
C566	★87-018-134-019	CAP,CERA SS 0.01(Z)
C567	★87-018-131-019	CAP,CERA SS 1000P(Z)
C568	★87-018-131-019	CAP,CERA SS 1000P(Z)
C569	★87-018-132-019	CAP,CERA SS 2200P(Z)
C570	★87-018-132-019	CAP,CERA SS 2200P(Z)
C578	★87-018-131-019	CAP,CERA SS 1000P(Z)
CON7	87-049-833-019	5P CONNECTOR SOCKET(PHONO)
⚠F1	87-035-364-010	FUSE,T1.6A
⚠FR100	87-029-125-019	RES,FUSE 1-1/4W
⚠FR103	87-029-105-019	RES,FUSE 10-1/2W(K,E,E1)
⚠FR103	87-029-366-019	RES,FUSE 4.7-1/2W(Z)
⚠FR104	87-029-105-019	RES,FUSE 10-1/2W(K,E,E1)
⚠FR104	87-029-366-019	RES,FUSE 4.7-1/2W(Z)
⚠FR106	87-029-102-010	RES,FUSE 47-1/4W
⚠FR107	87-029-089-019	RES,FUSE 4.7-1/4W
⚠FR393	87-029-102-019	RES,FUSE 47-1/4W
⚠FR394	87-029-125-019	RES,FUSE 1-1/4W
J1	★87-049-868-019	JACK PIN 4P(VCR/AUX,CD)(K,E,E1)
J1	★87-009-023-019	JACK PIN YKL21-0349(VCR/AUX,CD)(Z)
J3	87-009-079-019	JACK,6.3-W/S(PHONES)
J4	★87-033-205-019	TERMINAL,SP-4P(SPEAKERS)(K,E,E1)
J4	★87-033-206-019	TERMINAL,SP-4P(SPEAKERS)(Z)
J5	★87-049-851-019	JACK PIN 2P(SURROUND SPEAKERS)
L301	★87-003-128-019	MICRO INDUCTOR 5.6MMH
L302	★87-003-128-019	MICRO INDUCTOR 5.6MMH
L321	★81-794-661-019	COIL,OSC
L501	★87-005-366-010	COIL,1UH(Z)
L502	★87-005-366-010	COIL,1UH(Z)
R531	87-022-050-010	RES,MF 0.22J-1W
R532	87-022-050-010	RES,MF 0.22J-1W
R563	87-025-311-010	RES,MF 220-1W
R564	87-025-311-010	RES,MF 220-1W
RY1	87-045-285-010	RELAY VB12 MB
SFR301	★87-024-167-019	SFR,470(K,E1)
SFR302	★87-024-167-019	SFR,470(K,E1)
SFR307	★87-024-167-019	SFR,470
SFR308	★87-024-167-019	SFR,470
SFR313	★87-024-173-019	SFR,22K
SFR314	★87-024-173-019	SFR,22K
SFR321	★87-024-174-019	SFR,33K
SFR322	★87-024-174-019	SFR,33K
SFR325	★87-021-801-019	SFR,10K(K,E1)
SFR325	★87-021-802-010	SFR,22K(E,Z)
VR14	87-021-864-019	VOLUME,10K(VCR/AUX INPUT LEVEL)
VR15	87-021-864-019	VOLUME,10K(VCR/AUX INPUT LEVEL)

FRONT CIRCUIT BOARD SECTION

REF.NO.	PART NO.	DESCRIPTION
C601	★87-010-071-019	CAP,ELECT 1-50 SRE
C602	★87-010-071-019	CAP,ELECT 1-50 SRE
C605	★87-010-419-019	CAP,ELECT 4.7-16 SRE
C606	★87-010-419-019	CAP,ELECT 4.7-16 SRE
C613	★87-018-201-019	CAP,CERA SS 5600P
C614	★87-018-201-019	CAP,CERA SS 5600P
C615	★87-018-205-019	CAP,CERA SS 0.022
C616	★87-018-205-019	CAP,CERA SS 0.022
C617	★87-018-199-019	CAP,CERA SS 3300P
C618	★87-018-199-019	CAP,CERA SS 3300P
C619	★87-018-134-019	CAP,CERA SS 0.01
C620	★87-018-134-019	CAP,CERA SS 0.01
C621	★87-018-133-019	CAP,CERA SS 4700P
C622	★87-018-133-019	CAP,CERA SS 4700P
C623	★87-010-067-019	CAP,ELECT 0.1-50
C624	★87-010-067-019	CAP,ELECT 0.1-50
C625	★87-010-068-019	CAP,ELECT 0.22-50 SRE
C626	★87-010-068-019	CAP,ELECT 0.22-50 SRE
C627	★87-010-075-019	CAP,ELECT 10-16V
C628	★87-010-075-019	CAP,ELECT 10-16V
C629	★87-010-071-019	CAP,ELECT 1-50 SRE
C630	★87-010-071-019	CAP,ELECT 1-50 SRE
C631	★87-010-071-019	CAP,ELECT 1-50 SRE
C632	★87-010-071-019	CAP,ELECT 1-50 SRE
C633	★87-010-234-019	CAP,ELECT 47-16V SRE
C634	★87-010-234-019	CAP,ELECT 47-16V SRE
C635	★87-018-196-019	CAP,CERA SS 1500P
C636	★87-018-196-019	CAP,CERA SS 1500P
C637	★87-010-078-019	CAP,ELECT 47-6.3V SRE
C681	★87-018-134-019	CAP,CERA SS 0.01(Z)
C702	★87-018-134-019	CAP,CERA SS 0.01
C703	★87-010-404-019	CAP,ELECT 4.7-50V SME
C704	★87-010-384-019	CAP,ELECT 100-25V
C705	★87-018-134-019	CAP,CERA SS 0.01
C706	★87-018-134-019	CAP,CERA SS 0.01
C707	★87-010-371-019	CAP,ELECT 470-6.3V
C708	★87-018-134-019	CAP,CERA SS 0.01
C709	★87-010-374-019	CAP,ELECT 47-10V
C710	★87-010-078-019	CAP,ELECT 47-6.3V SRE
CP701	87-001-533-010	REMOTE UNIT GP1U501(REMOTE SENSOR
L701	★87-005-239-019	COIL,100UH
LCD701	83-317-612-019	LCD,3B(FREQ./TIMER DISPLAY)
LED1	87-001-124-019	LED,SLZ 381C(DOLBY-NR)
LED701	87-001-123-019	LED,SLZ-981C-02TI(VOLUME UP)
LED702	87-001-123-019	LED,SLZ-981C-02TI(VOLUME DOWN)
LED703	87-001-123-019	LED,SLZ-981C-02TI(MUTE)
LED704	87-001-124-019	LED,SLZ 381C(TAPE)
LED705	87-001-124-019	LED,SLZ 381C(TUNER)
LED706	87-001-124-019	LED,SLZ 381C(PHONO)
LED707	87-001-124-019	LED,SLZ 381C(VCR/AUX)
LED708	87-001-124-019	LED,SLZ 381C(CD)
LED709	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.1)
LED710	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.2)
LED711	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.3)
LED712	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.4)
LED713	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.5)
LED714	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.6)
S21	87-036-175-019	PUSH SW(DOLBY-NR)
S31	87-036-175-019	PUSH SW(TAPE SELECTOR)
S61	87-036-175-019	PUSH SW(DUBBING SPEED)(K,E1)
S701	87-036-142-010	TACT SW(TIMER/STANDBY)
S702	87-036-142-010	TACT SW(SLEEP)
S703	87-036-142-010	TACT SW(DISPLAY)
S704	87-036-142-010	TACT SW(ST/MONO)
S705	87-036-142-010	TACT SW(VOLUME UP)
S706	87-036-142-010	TACT SW(VOLUME DOWN)
S707	87-036-142-010	TACT SW(VCR/AUX)
S708	87-036-142-010	TACT SW(CD)
S709	87-036-142-010	TACT SW(PHONO)
S710	87-036-142-010	TACT SW(TUNER)
S711	87-036-142-010	TACT SW(TAPE)
S712	87-036-142-010	TACT SW(TUN./TIM.UP)
S713	87-036-142-010	TACT SW(TUN./TIM.DOWN)
S714	87-036-142-010	TACT SW(BAND)

REF.NO.	PART NO.	DESCRIPTION
S715	87-036-142-010	TACT SW(SET)
S716	87-036-142-010	TACT SW(PRESET1)
S717	87-036-142-010	TACT SW(PRESET2)
S718	87-036-142-010	TACT SW(PRESET3)
S719	87-036-142-010	TACT SW(PRESET4)
S720	87-036-142-010	TACT SW(PRESET5)
S721	87-036-142-010	TACT SW(PRESET6)
S722	87-036-142-010	TACT SW(PRESET7)
S723	87-036-142-010	TACT SW(PRESET8)
S724	87-036-142-010	TACT SW(POWER)
TC701	*87-011-224-019	TRIMMER CERAMIC 30P S
VR1	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 70HZ)
VR2	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 70HZ)
VR3	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 350HZ)
VR4	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 350HZ)
VR5	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 1KHZ)
VR6	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 1KHZ)
VR7	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 3.5KHZ)
VR8	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 3.5KHZ)
VR9	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 10KHZ)
VR10	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 10KHZ)
VR13	81-626-624-019	VR,50KW(BALANCE)
X701	*87-030-174-019	XTAL,RESONATOR 4.5MHZ

=== LAMP CIRCUIT BOARD SECTION ===

REF.NO.	PART NO.	DESCRIPTION
C751	*87-010-263-019	CAP,ELECT 100-10V
C752	*87-010-379-019	CAP,ELECT 22-16V SME
C753	*87-010-400-019	CAP,ELECT 0.47-50V SME
C754	*87-010-546-019	CAP,ELECT 0.33-50V SME
⚠FR713	87-029-094-010	RES,FUSE 15-1/4W
⚠FR714	87-029-094-010	RES,FUSE 15-1/4W
PL701	83-317-611-010	LAMP 12V
PL702	83-317-611-010	LAMP 12V

=== POWER CIRCUIT BOARD SECTION ===

REF.NO.	PART NO.	DESCRIPTION
⚠	87-033-147-019	FUSE CLAMP
⚠F2	87-035-364-010	FUSE T1.6A
⚠PT1	83-317-606-019	POWER TRANSFORMER(K)
⚠PT1	83-317-607-018	POWER TRANSFORMER(E,Z,E1)

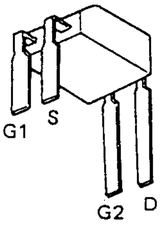
=== TR CIRCUIT BOARD SECTION ===

=== HEAD CIRCUIT BOARD SECTION === (K,E1 MODEL)

REF.NO.	PART NO.	DESCRIPTION
PH	S6-202-030-270	PB HEAD(D2)
S41	S6-403-020-040	SLIDE SW(FWD/REV)(D2)

=== MISCELLANEOUS ===

REF.NO.	PART NO.	DESCRIPTION
	*S6-201-130-030	DUMMY HEAD(D1)(E,Z)
⚠	*87-034-781-018	AC CORD E(E,Z,E1)
⚠	*87-034-592-018	AC CORD K(K)
⚠	*87-085-185-010	BUSHING AC CORD E
EH	S6-202-140-210	ERASE HEAD(D2)(E,Z)
EH	S6-202-140-210	ERASE HEAD(D1)(K,E1)
M101	S6-003-030-380	MOTOR(D1,2)
PH	S6-202-010-750	PB HEAD(D1)(E,Z)
RPH	S6-202-010-750	REC/PB HEAD(D2)(E,Z)
RPH	S6-202-010-750	REC/PB HEAD(D1)(K,E1)
S42	S6-401-010-610	LEAF SW(MOTOR,D1)(E,Z)
S42	S6-401-010-610	LEAF SW(MOTOR,D2)(K,E1)
S43	S6-401-011-310	LEAF SW(PLAY,D1)(E,Z)
S43	S6-401-011-310	LEAF SW(PLAY,D2)(K,E1)
S44	S6-401-011-340	LEAF SW(MOTOR,D2)(E,Z)
S44	S6-401-011-340	LEAF SW(MOTOR,D1)(K,E1)
S45	S6-401-010-380	LEAF SW(REC,D2)(E,Z)
S45	S6-401-010-380	LEAF SW(REC,D1)(K,E1)
S46	S6-401-011-490	LEAF SW(HI-SPEED,D1)(E,Z)



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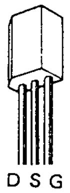

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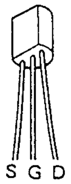

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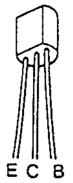

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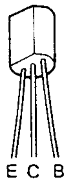
2SC1815
2SC1923
2SC2001



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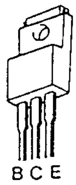

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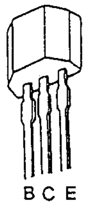
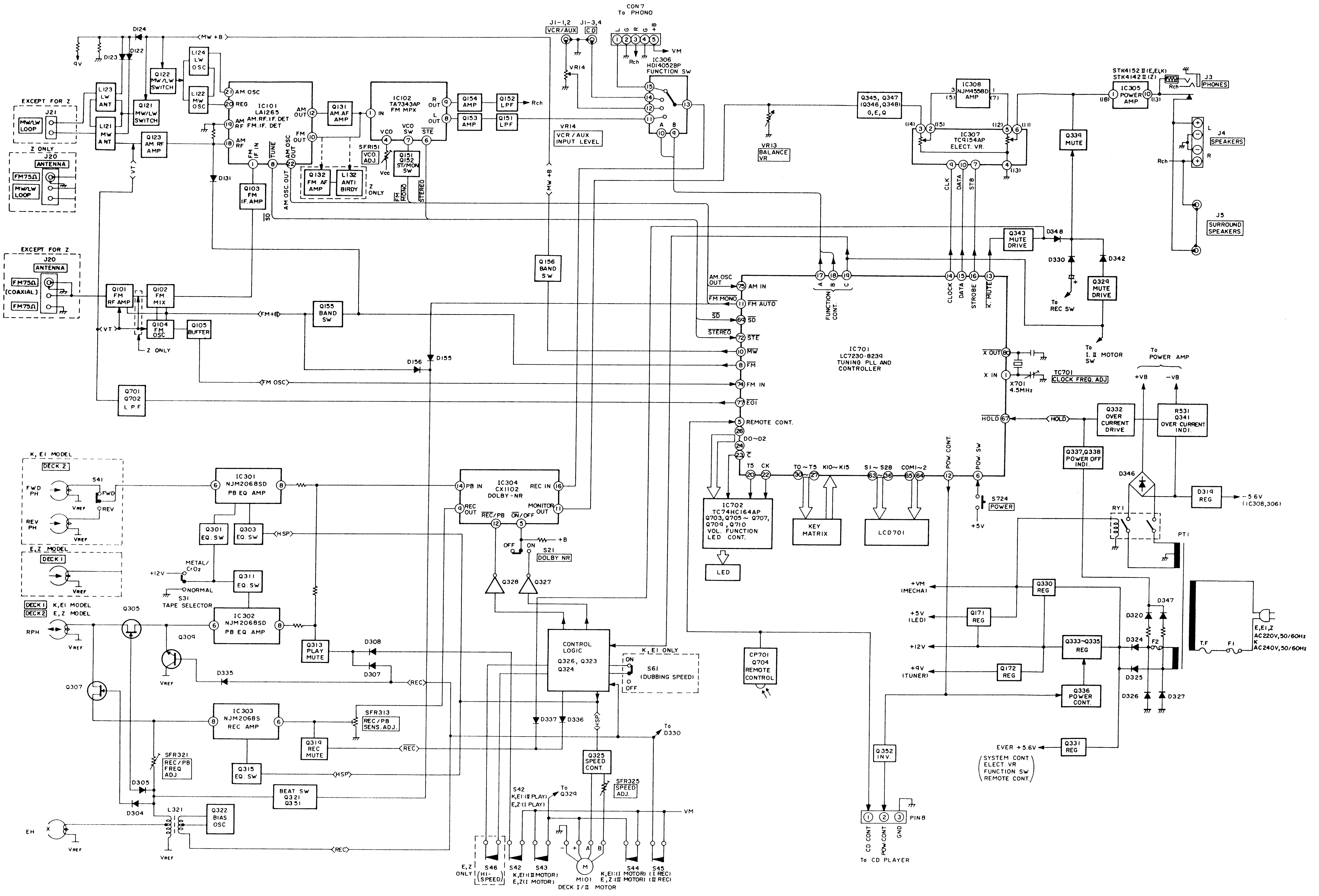
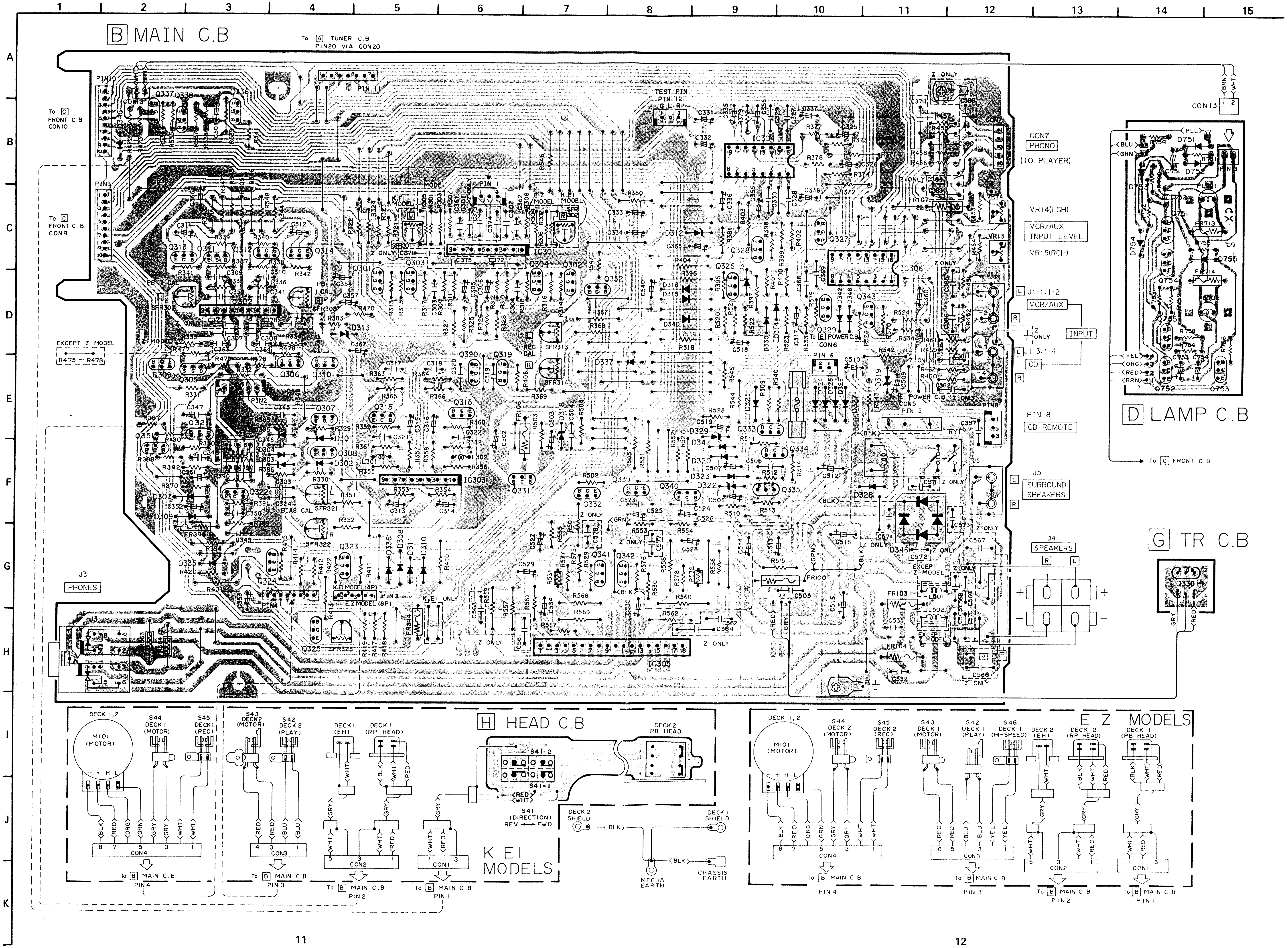
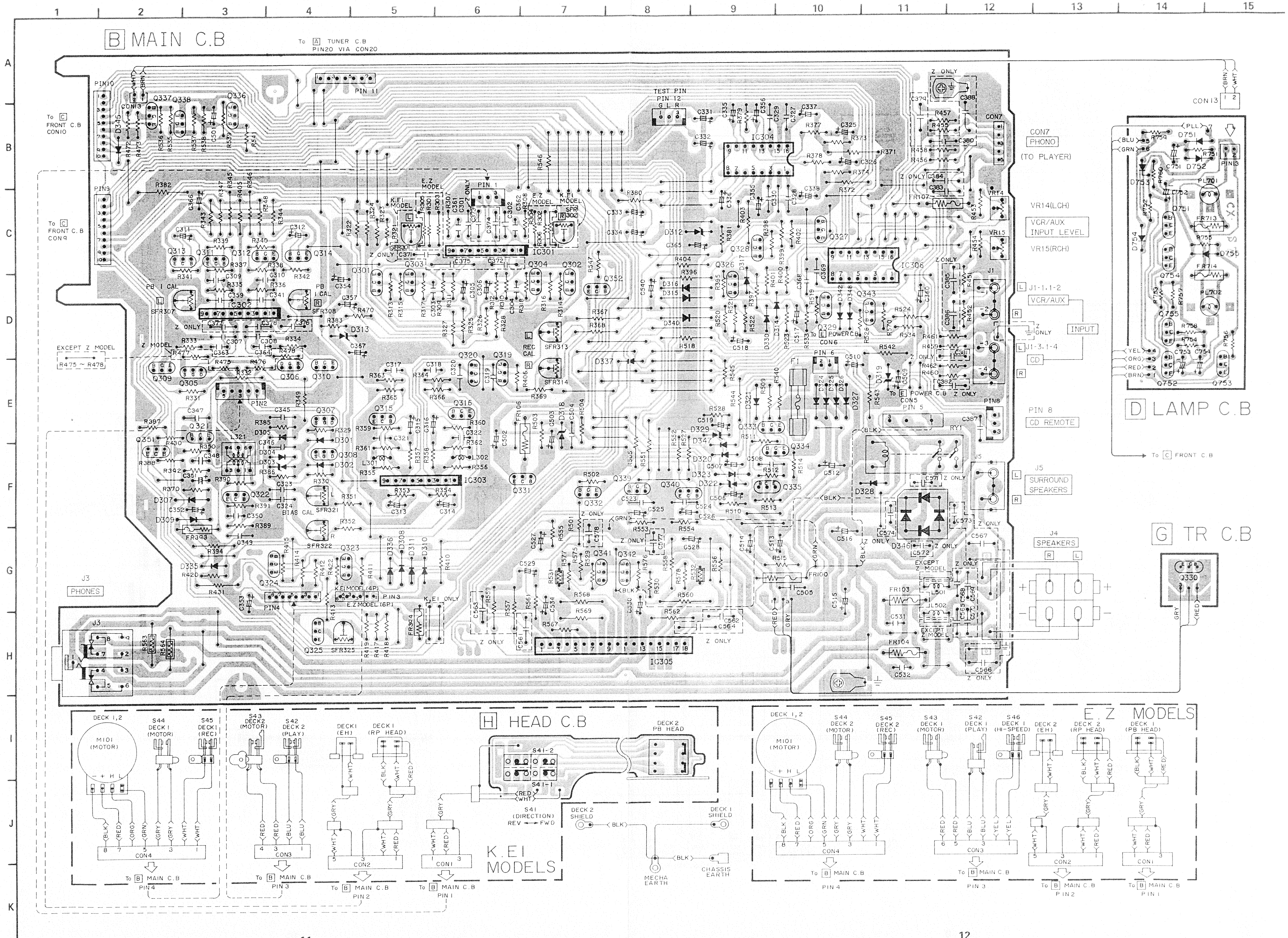


DTA114
DTC114
RN1204

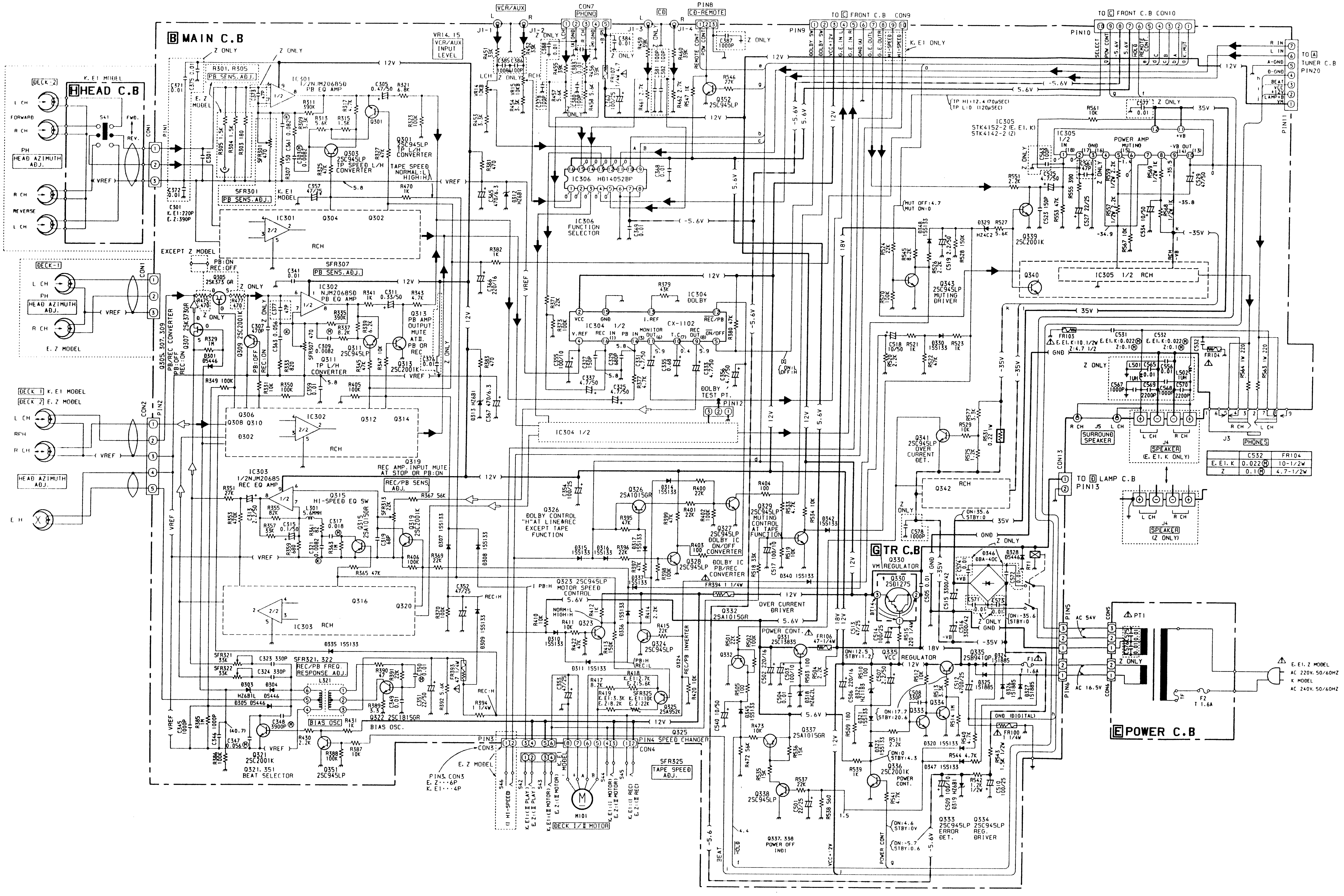
BLOCK DIAGRAM


CON7
To PHONO
J1-1,2 VCR/AUX
J1-3,4 CD
VR14
IC306 HD14052BP FUNCTION SW
VR14 VCR/AUX INPUT LEVEL
VR13 BALANCE VR
Q345, Q347 (Q346, Q348) G,E,Q
IC308 NJM4558D AMP
IC307 TC9154AP ELECT. VR.
CLK DATA STB
STK4152 II (E,E(K)) STK4142 II (Z)
IC305 POWER AMP
J3 PHONES
J4 SPEAKERS
J5 SURROUND SPEAKERS
Q339 MUTE
Q343 MUTE DRIVE
D348
D330
D342
Q329 MUTE DRIVE
To REC SW
To I.II MOTOR SW
To POWER AMP
+VB −VB
D124
D122
D123
9V
MW+B
EXCEPT FOR Z
J21 MW/LW LOOP
L123 LW ANT
L121 MW ANT
Q122 MW/LW SWITCH
Q121 MW/LW SWITCH
L124 LW OSC
L122 MW OSC
Q123 AM RF AMP
Z ONLY
J20 ANTENNA FM75Ω MW/LW LOOP
IC101 LA1265 AM.RF.IF.DET FM.IF.DET
AM OSC
REG
AM RF
FM IF IN
TUNE
AM OSC OUT
AM OUT
FM OUT
Q131 AM.AF AMP
Q132 FM AF AMP
L132 ANTI BIRDY
Z ONLY
IC102 TA7343AP FM MPX
R OUT
L OUT
VCO
VCO SW
STE
SFR151 VCO ADJ.
Vcc
Q151 Q152 ST/MON SW
Q154 AMP
Q153 AMP
Q152 LPF
Q151 LPF
Rch
D131
Q103 FM IF.AMP
SD
FM MONO
STEREO
MW+B
Q156 BAND SW
EXCEPT FOR Z
J20 ANTENNA FM75Ω (COAXIAL) FM75Ω
Q101 FM RF AMP
Q102 FM MIX
Q104 FM OSC
Q105 BUFFER
Q155 BAND SW
FM+B
VT
Z ONLY
D156 D155
FM OSC
Q701 Q702 LPF
AM.OSC OUT
FM MONO
SD
STEREO
AM IN
FM AUTO
SD
STE
MW
FM
FM IN
EOI
REMOTE CONT.
DO~D2
C
FUNCTION CONT. A B C
CLOCK DATA STROBE K.MUTE
IC701 LC7230-8239 TUNING PLL AND CONTROLLER
X OUT
X IN
X701 4.5MHz
TC701 CLOCK FREQ. ADJ
HOLD
T5 CK
T0~T5 KI0~KI5
S1~S28
COM1~2
POW. CONT.
POW. SW
IC702 TC74HC164AP Q703, Q705~Q707, Q709, Q710 VOL. FUNCTION LED CONT.
LED
KEY MATRIX
LCD701
S724 POWER
+5V
Q332 OVER CURRENT DRIVE
R531 Q341 OVER CURRENT INDI.
Q337,Q338 POWER OFF INDI.
D346
D319 REG
−5.6V (IC308,306)
RY1
PT1
K, E1 MODEL
DECK 2
FWD PH
REV PH
S41 FWD REV
VREF
E, Z MODEL
DECK 1
DECK 1 K,E1 MODEL
DECK 2 E,Z MODEL
RPH
Q305
Q309
Q307
IC301 NJM2068SD PB EQ AMP
Q301 EQ. SW
Q303 EQ. SW
HSP
+12V
METAL/CrO2
NORMAL
S31 TAPE SELECTOR
Q311 EQ. SW
IC302 NJM2068SD PB EQ AMP
Q313 PLAY MUTE
D308
D307
D335
REC
IC304 CX1102 DOLBY-NR
PB IN
REC IN
REC OUT
REC/PB
ON/OFF
MONITOR OUT
OFF ON
+B
S21 DOLBY NR
Q328 Q327
CONTROL LOGIC Q326, Q323 Q324
K, E1 ONLY
S61 (DUBBING SPEED)
CP701 Q704 REMOTE CONTROL
IC303 NJM2068S REC AMP
SFR313 REC/PB SENS.ADJ.
Q319 REC MUTE
SFR321 REC/PB FREQ ADJ
Q315 EQ. SW
D305
D304
BEAT SW Q321 Q351
L321
Q322 BIAS OSC
EH
D337 D336
Q325 SPEED CONT.
To D330
SFR325 SPEED ADJ.
S42 K,E1:(II PLAY) E,Z:(I PLAY)
To Q329
VM
E,Z ONLY S46 (HI-SPEED)
S42 S43 K,E1:(II MOTOR) E,Z:(I MOTOR)
M101 DECK I/II MOTOR
S44 S45 K,E1:(I MOTOR) (I REC) E,Z:(II MOTOR) (II REC)
+VM (MECHA)
+5V (LED)
+12V
+9V (TUNER)
Q330 REG
Q171 REG
Q333~Q335 REG
Q172 REG
Q336 POWER CONT.
D347 D320 D324 F2 D325 D326 D327
T.F F1
E,E1,Z AC220V,50/60Hz K AC240V,50/60Hz
Q352 INV.
EVER +5.6V
Q331 REG
SYSTEM CONT ELECT. VR FUNCTION SW REMOTE CONT.
CD CONT POW CONT GND
PIN8
To CD PLAYER


B MAIN C.B
To A TUNER C.B PIN20 VIA CON20
To C FRONT C.B CON10
To C FRONT C.B CON9
EXCEPT Z MODEL
R475 ~ R478
J3
PHONES
TEST PIN
PIN 12
CON7
PHONO
(TO PLAYER)
VR14(LCH)
VCR/AUX INPUT LEVEL
VR15(RCH)
J1-1.1-2
VCR/AUX
Z ONLY
INPUT
J1-3.1-4
CD
PIN 8
CD REMOTE
J5
SURROUND SPEAKERS
J4
SPEAKERS
CON13
D LAMP C.B
To C FRONT C.B
G TR C.B
IC301
IC303
IC304
IC305
IC306
H HEAD C.B
S41-2
S41-1
S41 (DIRECTION) REV ⟷ FWD
DECK 2 SHIELD
DECK 1 SHIELD
MECHA EARTH
CHASSIS EARTH
DECK 2 PB HEAD
K.E.I MODELS
E.Z MODELS
DECK 1,2
M101 (MOTOR)
S44 DECK 1 (MOTOR)
S45 DECK 2 (REC)
S43 DECK 2 (MOTOR)
S42 DECK 2 (PLAY)
DECK 1 (EH)
DECK 1 (RP HEAD)
S43 DECK 1 (MOTOR)
S42 DECK 1 (PLAY)
S46 DECK 1 (HI-SPEED)
DECK 2 (EH)
DECK 2 (RP HEAD)
DECK 1 (PB HEAD)
CON4
CON3
CON2
CON1
To B MAIN C.B PIN 4
To B MAIN C.B PIN 3
To B MAIN C.B PIN 2
To B MAIN C.B PIN 1

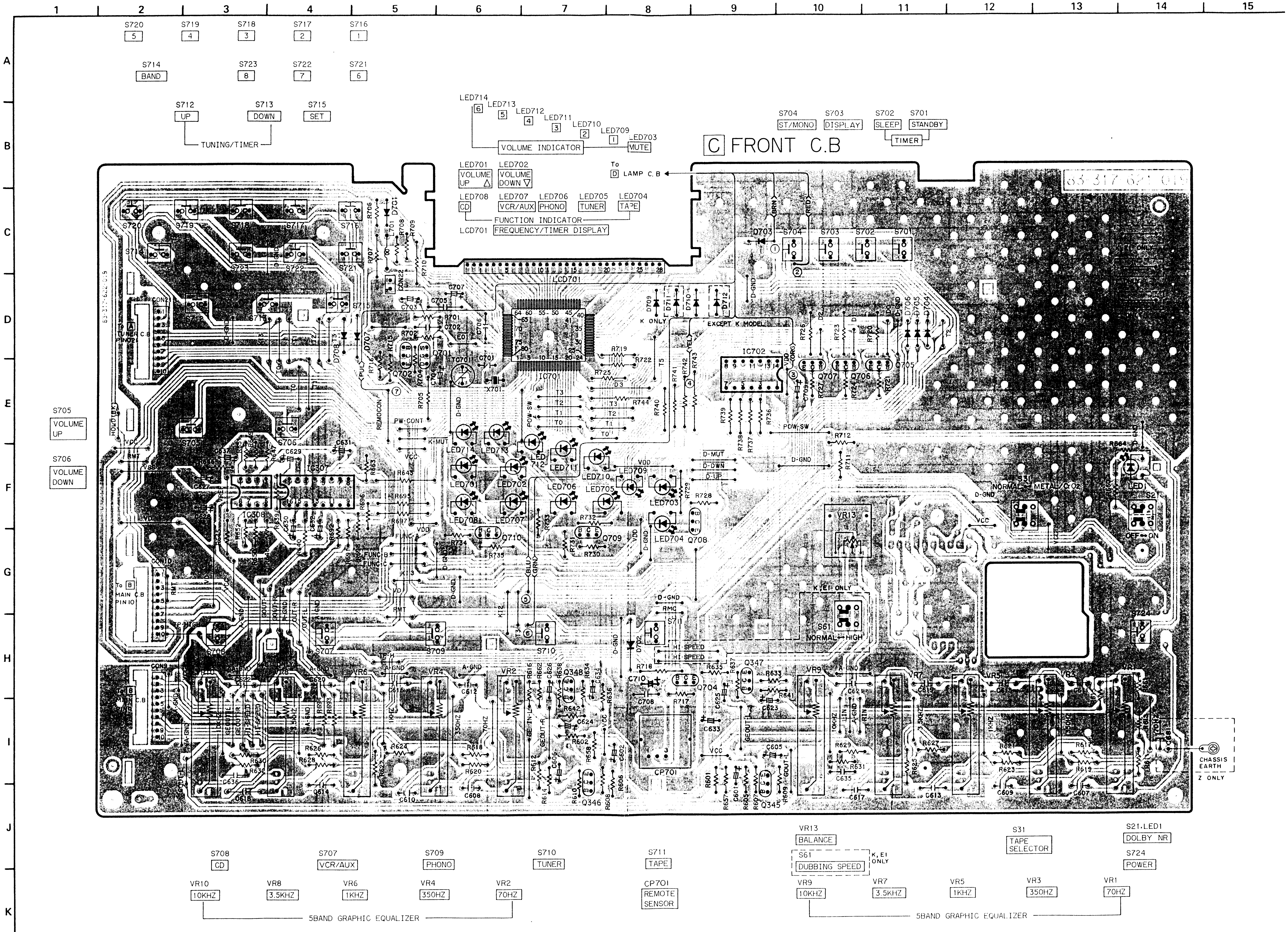

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
K
B MAIN C.B
To A TUNER C.B PIN20 VIA CON20
To C FRONT C.B CON10
To C FRONT C.B CON9
EXCEPT Z MODEL
R475 ~ R478
TEST PIN
PIN 12
CON7
PHONO
(TO PLAYER)
VR14(LCH)
VCR/AUX INPUT LEVEL
VR15(RCH)
J1-1.1-2
VCR/AUX
INPUT
J1-3.1-4
CD
PIN 8
CD REMOTE
J5
SURROUND SPEAKERS
J4
SPEAKERS
J3
PHONES
CON13
D LAMP C.B
To C FRONT C.B
G TR C.B
Q330
H HEAD C.B
DECK 2 PB HEAD
S41-2
S41-1
S41 (DIRECTION)
REV ← → FWD
DECK 2 SHIELD
DECK 1 SHIELD
MECHA EARTH
CHASSIS EARTH
K.E.I MODELS
E.Z MODELS
M101 (MOTOR)
CON4
CON3
CON2
CON1
To B MAIN C.B PIN 4
To B MAIN C.B PIN 3
To B MAIN C.B PIN 2
To B MAIN C.B PIN 1
IC301
IC302
IC303
IC304
IC305
IC306
RY1
F1
Z ONLY

SCHEMATIC DIAGRAM – 1

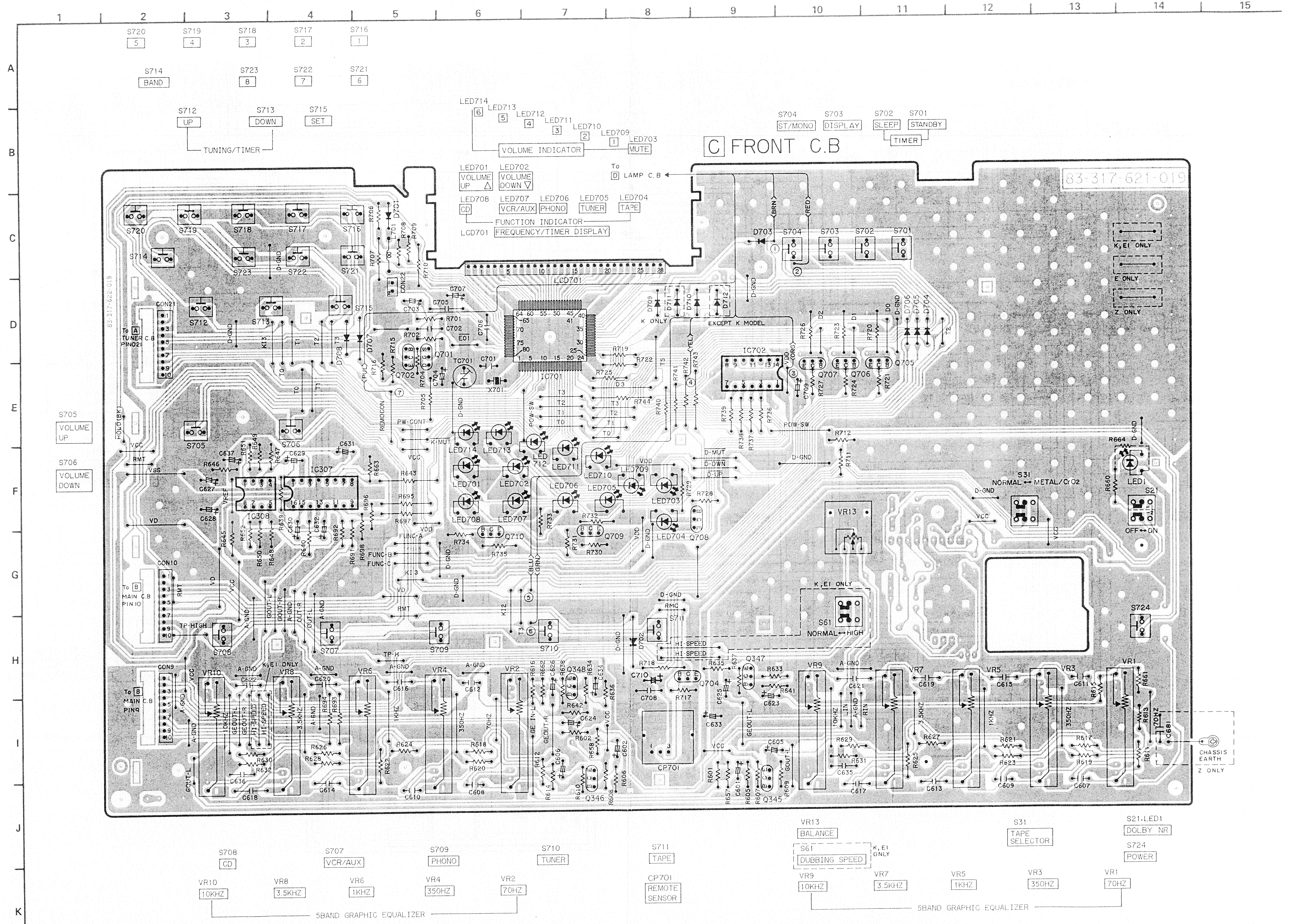


B MAIN C.B
H HEAD C.B
G TR C.B
E POWER C.B
DECK-2
DECK-1
HEAD AZIMUTH ADJ.
PB SENS. ADJ.
SFR301
SFR307
IC301 1/2 NJM2068SD PB EQ AMP
IC302 NJM2068SD PB EQ AMP
IC303 1/2 NJM2068S REC EQ AMP
IC304 1/2 CX-1102 DOLBY
IC305 STK4152-2 (E, E1, K) STK4142-2 (Z) POWER AMP
IC306 HD14052BP FUNCTION SELECTOR
Q301 2SC945LP TP SPEED L/H CONVERTER
Q311 TP L/H CONVERTER
Q313 PB AMP OUTPUT MUTE AT II. PB OR REC
Q315 HI-SPEED EQ SW
Q319 REC AMP. INPUT MUTE AT STOP OR PB:ON
Q321, 351 BEAT SELECTOR
Q322 2SC1815GR
Q323 2SC945LP MOTOR SPEED CONTROL
Q326 2SA1015GR DOLBY CONTROL "H" AT LINE&REC EXCEPT TAPE FUNCTION
Q327 2SC945LP DOLBY IC ON/OFF CONVERTER
Q328 2SC945LP DOLBY IC PB/REC CONVERTER
Q329 2SC945LP MUTING CONTROL AT TAPE FUNCTION
Q330 2SD1275 VM REGULATOR
Q331 2SC1383S POWER CONT.
Q332 2SA1015GR OVER CURRENT DRIVER
Q333 2SC945LP ERROR DET.
Q334 2SC945LP REG. DRIVER
Q335 2SB941OP VCC REGULATOR
Q336 2SC2001K POWER CONT.
Q337, 338 POWER OFF
Q339 2SC2001K
Q341 2SC945LP OVER CURRENT DET.
Q343 2SC945LP MUTING DRIVER
Q352 2SC945LP
REC/PB SENS ADJ.
REC/PB FREQ. RESPONSE ADJ.
BIAS OSC
SFR325 TAPE SPEED ADJ.
DOLBY TEST PT.
VCR/AUX INPUT LEVEL
CON7 PHONO
CD
PIN8 CD-REMOTE
TO C FRONT C.B CON9
TO C FRONT C.B CON10
TO A TUNER C.B PIN20
TO D LAMP C.B PIN13
M101 DECK I/II MOTOR
SURROUND SPEAKER
SPEAKER (E, E1, K ONLY)
SPEAKER (Z ONLY)
PHONES
PT1
E, E1, Z MODEL AC 220V, 50/60HZ
K MODEL AC 240V, 50/60HZ
F2 T 1.6A
	C532	FR104
E, E1, K	0.022(M)	10-1/2W
Z	0.1(M)	4.7-1/2W

WIRING – 2

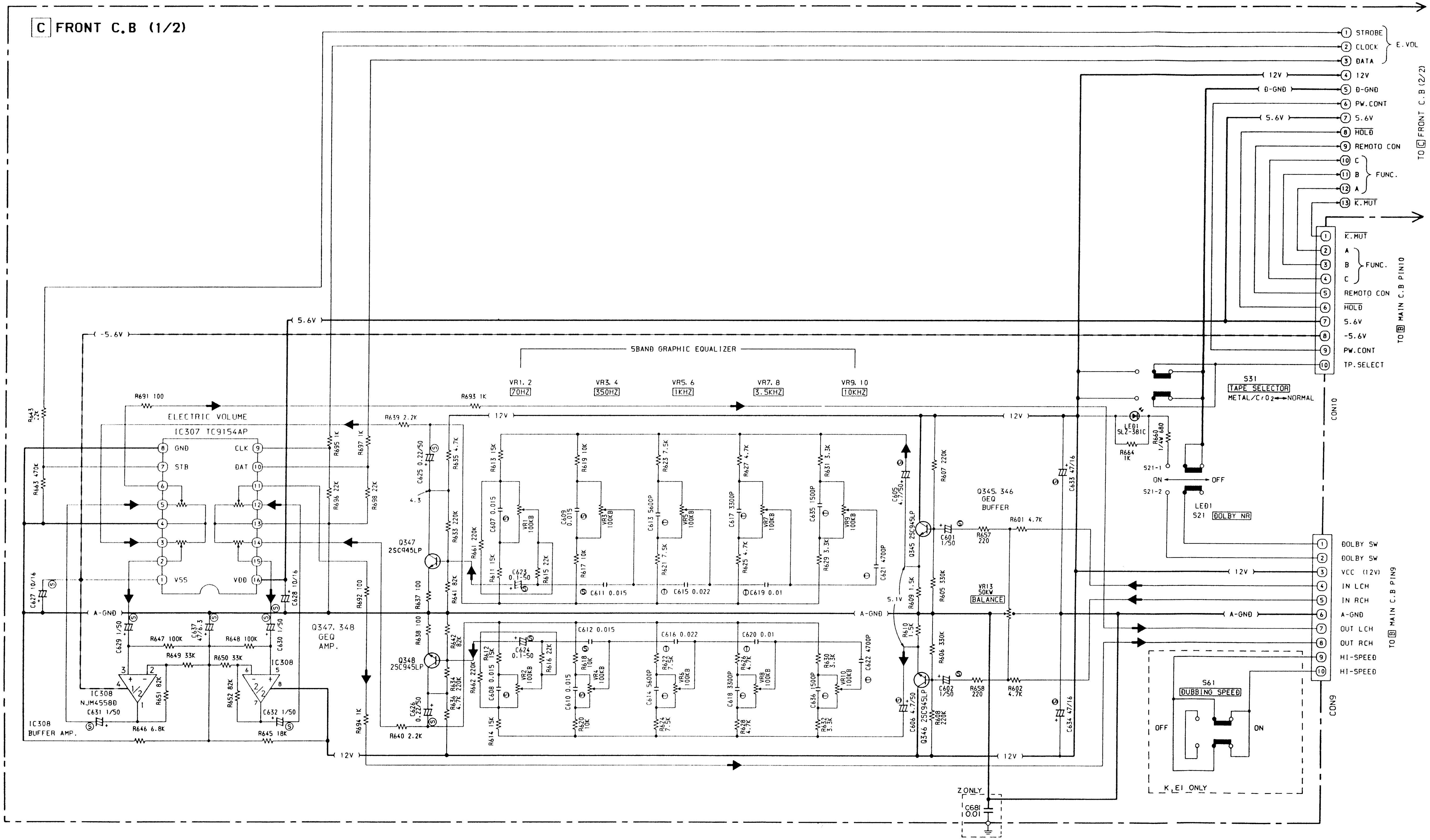

C FRONT C.B
S720 5
S719 4
S718 3
S717 2
S716 1
S714 BAND
S723 8
S722 7
S721 6
S712 UP
S713 DOWN
S715 SET
TUNING/TIMER
LED714 6
LED713 5
LED712 4
LED711 3
LED710 2
LED709 1
LED703 MUTE
VOLUME INDICATOR
LED701 VOLUME UP △
LED702 VOLUME DOWN ▽
To D LAMP C.B
LED708 CD
LED707 VCR/AUX
LED706 PHONO
LED705 TUNER
LED704 TAPE
FUNCTION INDICATOR
LCD701 FREQUENCY/TIMER DISPLAY
S704 ST/MONO
S703 DISPLAY
S702 SLEEP
S701 STANDBY
TIMER
S705 VOLUME UP
S706 VOLUME DOWN
To A TUNER C.B PIN 2
To B MAIN C.B PIN 10
CHASSIS EARTH
Z ONLY
K ONLY
EXCEPT K MODEL
K, EI ONLY
NORMAL HIGH
NORMAL METAL
OFF ON
HI-SPEED
VR13 BALANCE
S61 DUBBING SPEED
K, EI ONLY
S31 TAPE SELECTOR
S21.LED1 DOLBY NR
S724 POWER
S708 CD
S707 VCR/AUX
S709 PHONO
S710 TUNER
S711 TAPE
CP701 REMOTE SENSOR
VR10 10KHZ
VR8 3.5KHZ
VR6 1KHZ
VR4 350HZ
VR2 70HZ
5BAND GRAPHIC EQUALIZER
VR9 10KHZ
VR7 3.5KHZ
VR5 1KHZ
VR3 350HZ
VR1 70HZ
5BAND GRAPHIC EQUALIZER

WIRING – 2

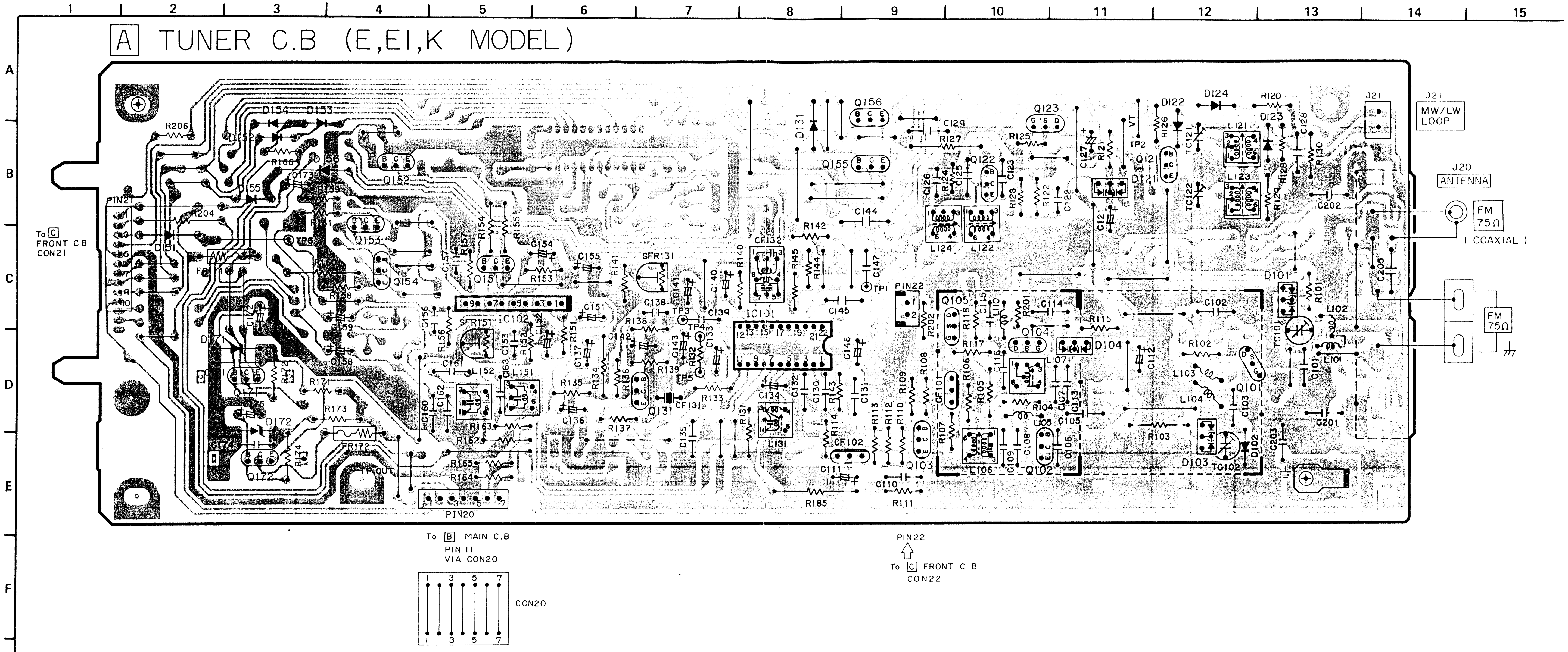


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J K
C FRONT C.B
83-317-621-019
S720 5
S719 4
S718 3
S717 2
S716 1
S714 BAND
S723 8
S722 7
S721 6
S712 UP
S713 DOWN
S715 SET
TUNING/TIMER
LED714 6
LED713 5
LED712 4
LED711 3
LED710 2
LED709 1
LED703 MUTE
VOLUME INDICATOR
S704 ST/MONO
S703 DISPLAY
S702 SLEEP
S701 STANDBY
TIMER
LED701 VOLUME UP △
LED702 VOLUME DOWN ▽
To D LAMP C.B
LED708 CD
LED707 VCR/AUX
LED706 PHONO
LED705 TUNER
LED704 TAPE
FUNCTION INDICATOR
LCD701 FREQUENCY/TIMER DISPLAY
LCD701
IC701
IC702
IC307
IC308
K,EI ONLY
E ONLY
Z ONLY
K ONLY
EXCEPT K MODEL
To A TUNER C.B PIN021
CON21
To B MAIN C.B PIN10
CON10
To B MAIN C.B PIN9
CON9
S705 VOLUME UP
S706 VOLUME DOWN
S31 NORMAL ↔ METAL/CrO2
S21 OFF ↔ ON
LED1
VR13
S61 NORMAL ↔ HIGH
S724
CHASSIS EARTH
Z ONLY
VR13 BALANCE
S61 DUBBING SPEED
K,EI ONLY
S31 TAPE SELECTOR
S21.LED1 DOLBY NR
S724 POWER
S708 CD
S707 VCR/AUX
S709 PHONO
S710 TUNER
S711 TAPE
CP701 REMOTE SENSOR
VR10 10KHZ
VR8 3.5KHZ
VR6 1KHZ
VR4 350HZ
VR2 70HZ
5BAND GRAPHIC EQUALIZER
VR9 10KHZ
VR7 3.5KHZ
VR5 1KHZ
VR3 350HZ
VR1 70HZ
5BAND GRAPHIC EQUALIZER

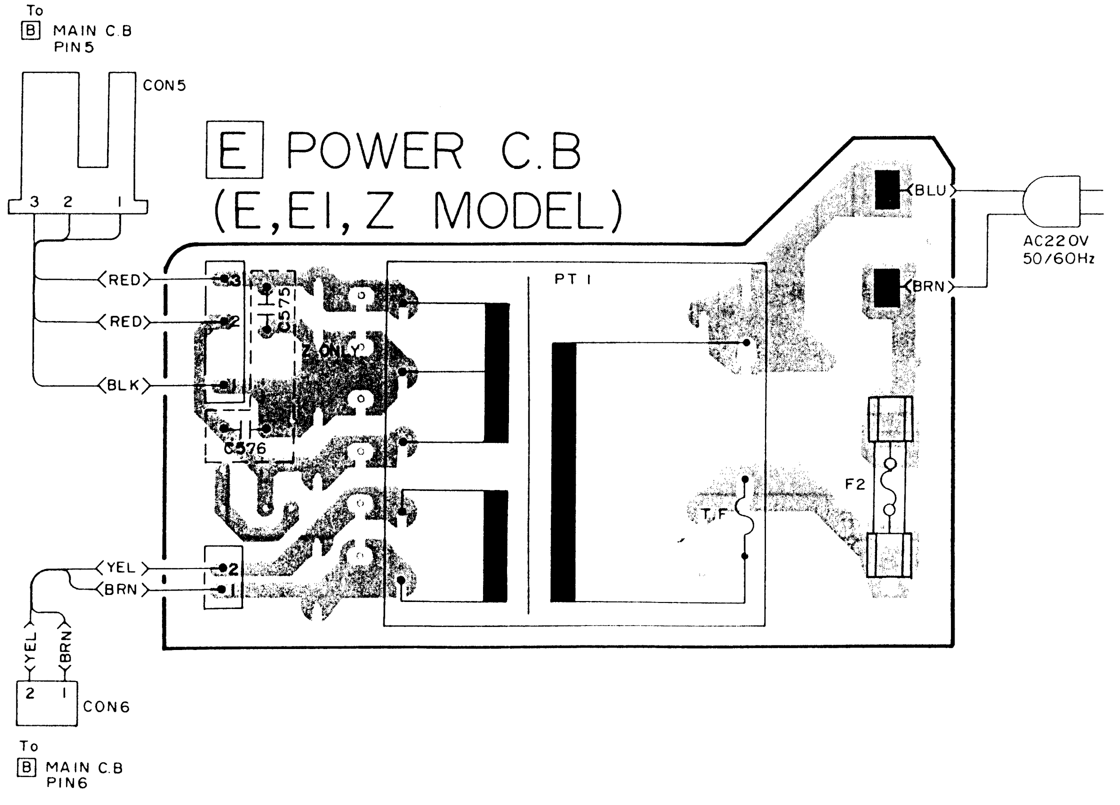
SCHEMATIC DIAGRAM – 2


C FRONT C.B (1/2)
STROBE
CLOCK
DATA
E.VOL
12V
D-GND
PW.CONT
5.6V
HOLD
REMOTO CON
C
B
A
FUNC.
K.MUT
TO C FRONT C.B (2/2)
K.MUT
A
B
C
FUNC.
REMOTO CON
HOLD
5.6V
-5.6V
PW.CONT
TP.SELECT
TO B MAIN C.B PIN10
CON10
S31
TAPE SELECTOR
METAL/CrO2 ⟷ NORMAL
LED1
SL2-381C
R664 1K
R660 1/4W 680
S21-1
ON
OFF
S21-2
LED1
S21 DOLBY NR
DOLBY SW
DOLBY SW
VCC (12V)
IN LCH
IN RCH
A-GND
OUT LCH
OUT RCH
HI-SPEED
HI-SPEED
TO B MAIN C.B PIN9
CON9
S61
DUBBING SPEED
OFF
ON
K,E1 ONLY
Z ONLY
C681 0.01
5.6V
-5.6V
5BAND GRAPHIC EQUALIZER
VR1.2 70HZ
VR3.4 350HZ
VR5.6 1KHZ
VR7.8 3.5KHZ
VR9.10 10KHZ
R691 100
ELECTRIC VOLUME
IC307 TC9154AP
GND
STB
VSS
CLK
DAT
VDD
R693 1K
R639 2.2K
12V
R695 1K
R697 1K
R696 22K
R698 22K
R643 2.2K
R663 470K
C627 10/16
C628 10/16
A-GND
C629 1/50
C630 1/50
C637 47/6.3
R647 100K
R648 100K
R649 33K
R650 33K
IC308
IC308 NJM4558D
C631 1/50
C632 1/50
R651 82K
R652 82K
R646 6.8K
R645 18K
IC308 BUFFER AMP.
Q347, 348 GEQ AMP.
R692 100
R694 1K
R640 2.2K
12V
C625 0.22/50
C626 0.22/50
R635 4.7K
R633 220K
R641 82K
R637 100
R638 100
R642 82K
R634 4.7K
R636 220K
Q347 2SC945LP
Q348 2SC945LP
R661 220K
R662 220K
R613 15K
R611 15K
R612 15K
R614 15K
C607 0.015
C608 0.015
VR1 100KB
VR2 100KB
C623 0.1-50
C624 0.1-50
R615 22K
R616 22K
R619 10K
R617 10K
R618 10K
R620 10K
C609 0.015
C610 0.015
VR3 100KB
VR4 100KB
C611 0.015
C612 0.015
R623 7.5K
R621 7.5K
R622 7.5K
R624 7.5K
C613 5600P
C614 5600P
VR5 100KB
VR6 100KB
C615 0.022
C616 0.022
R627 4.7K
R625 4.7K
R626 4.7K
R628 4.7K
C617 3300P
C618 3300P
VR7 100KB
VR8 100KB
C619 0.01
C620 0.01
R631 3.3K
R629 3.3K
R630 3.3K
R632 3.3K
C635 1500P
C636 1500P
VR9 100KB
VR10 100KB
C621 4700P
C622 4700P
C605 4.7/50
C606 4.7/50
Q345 2SC945LP
Q346 2SC945LP
R609 1.5K
R610 1.5K
5.1V
A-GND
R607 220K
R605 330K
R606 330K
R608 220K
Q345, 346 GEQ BUFFER
C601 1/50
C602 1/50
R657 220
R658 220
R601 4.7K
R602 4.7K
VR13 50KW BALANCE
C633 47/16
C634 47/16
12V
12V
A-GND

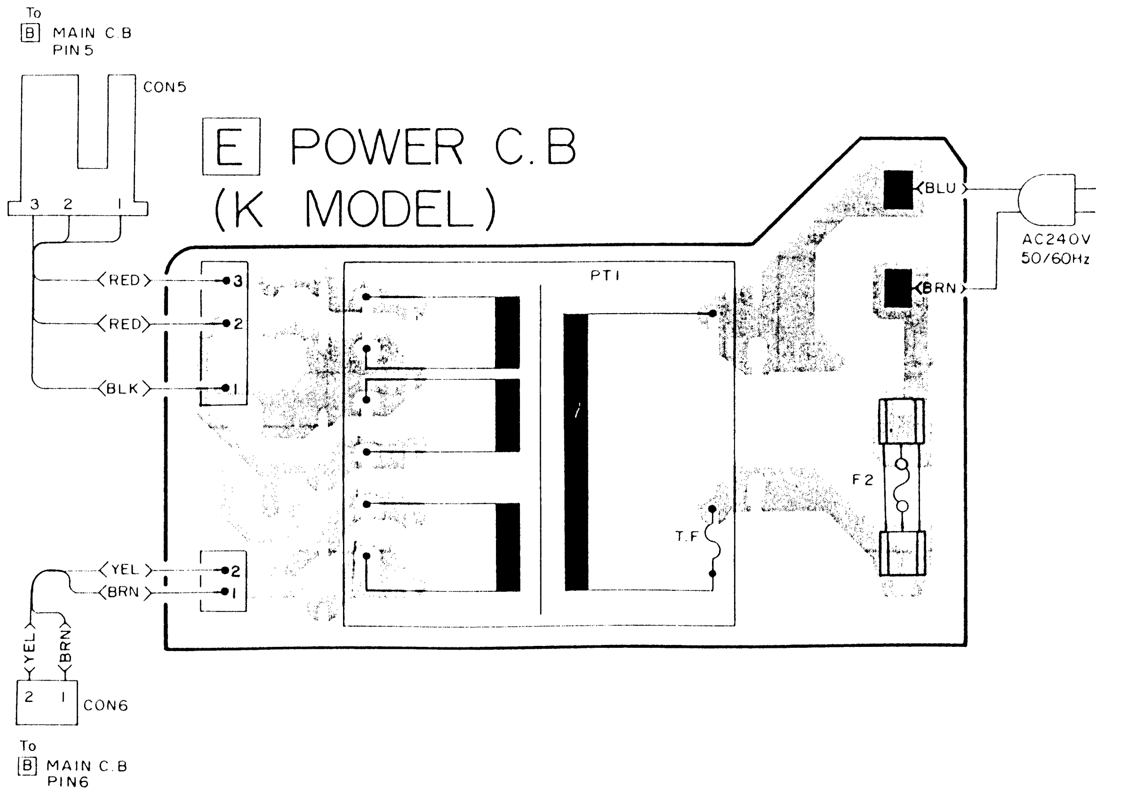
A TUNER C.B (E,EI,K MODEL)


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J K
R206
D154 D153
D152
R166
D155
Q173
PIN21
R204
D151
To C FRONT C.B CON21
FR171
Q153
R160
TP5
Q154
R158
C159
D171
C158
Q171
R171
R173
D172
FR172
R174
Q172
TP OUT
Q152
R157
R154
R155
C154
C155
C157
Q151
R153
R141
SFR131
C156
R158
SFR151
IC102
C151
R151
R152
C152
C161
L152
C163
L151
C160
C162
R163
R162
R165
R164
PIN20
1 3 5 7
C137
C142
R138
C138
TP3
C141
TP4
C139
C133
C143
R132
R139
TP5
R134
R135
R136
R133
C136
R137
Q131
CF131
C135
R131
R140
C140
CF132
IC101
C134
C132
L131
C130
C131
R143
R114
R113
R112
CF102
C111
R185
R142
R145
R144
C144
C147
TP1
C145
C146
PIN22
Q156
Q155
D131
C129
R127
Q123
R125
Q122
C126
R124
C125
C123
R123
R122
C122
L124
L122
C127
R121
VT
TP2
R126
Q121
D121
C121
D122
TC121
D124
R120
D123
L121
C128
R130
TC122
L123
R128
R129
C202
J21
J21 MW/LW LOOP
J20 ANTENNA
FM 75Ω (COAXIAL)
FM 75Ω
Q105
R202
R118
C115
L110
R201
C114
R115
Q104
D104
R117
R106
C116
L107
C112
R108
R109
R110
CF101
R105
R104
C107
C113
C105
L105
C106
C108
C109
R107
L106
Q102
Q103
C110
R111
C102
R102
L103
L104
R103
D103
TC102
D102
Q101
C103
C101
L101
L102
TC101
D101
R101
C205
C203
C201
To B MAIN C.B PIN 11 VIA CON20
1 3 5 7
CON20
PIN22
To C FRONT C.B CON22

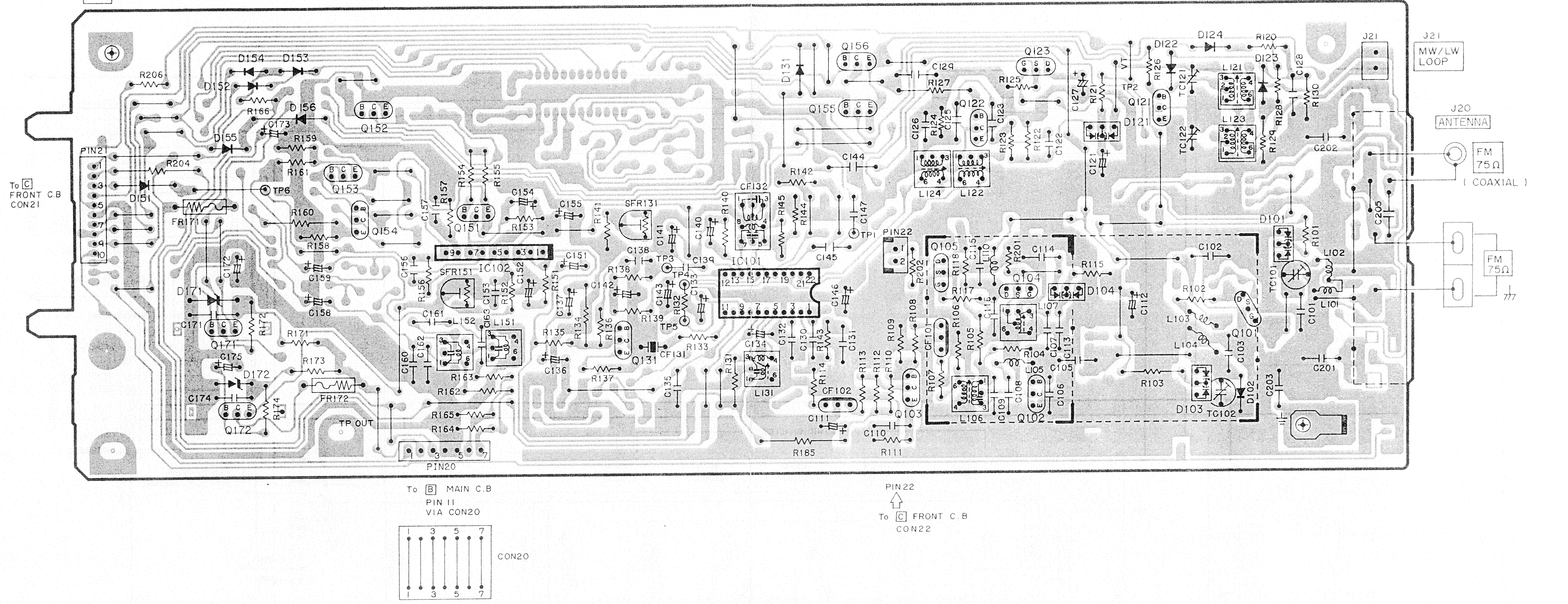
E POWER C.B (E,EI,Z MODEL)


To B MAIN C.B PIN5
CON5
3 2 1
RED
RED
BLK
3
2
1
C575
(Z ONLY)
C576
PT1
BLU
BRN
AC220V 50/60Hz
F2
T.F
YEL
BRN
2
1
YEL
BRN
2 1
CON6
To B MAIN C.B PIN6

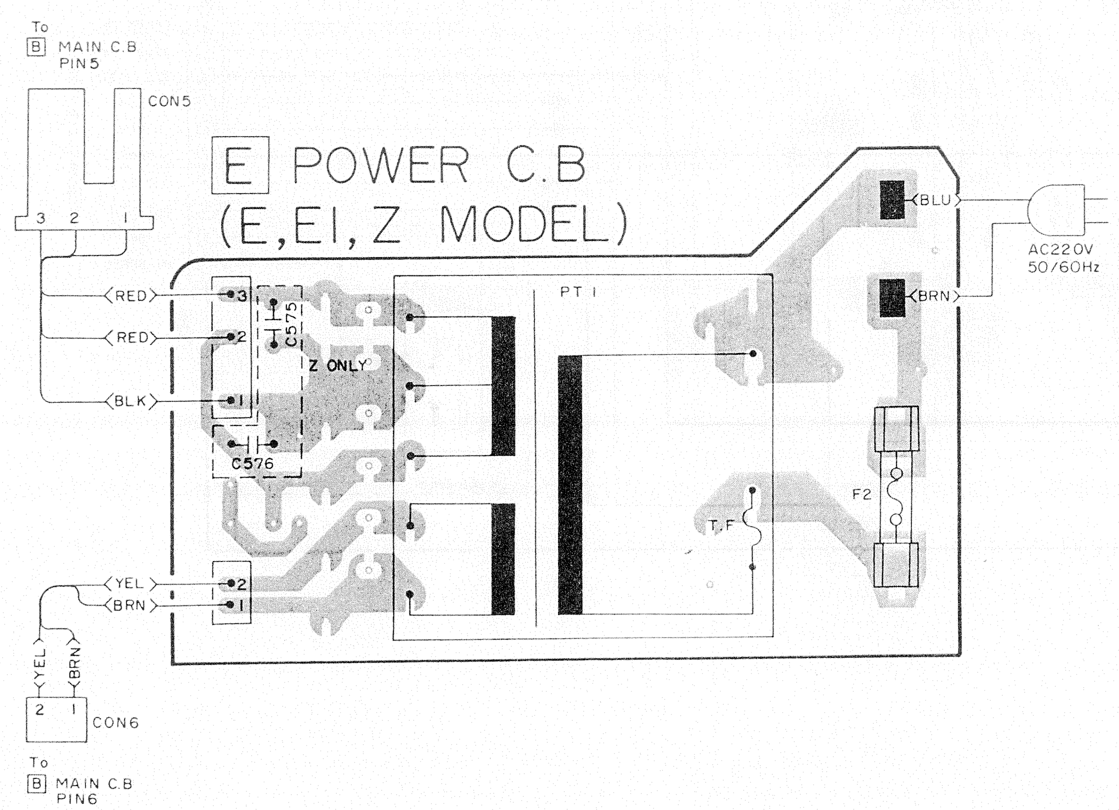
E POWER C.B (K MODEL)


To B MAIN C.B PIN5
CON5
3 2 1
RED
RED
BLK
3
2
1
PT1
BLU
BRN
AC240V 50/60Hz
F2
T.F
YEL
BRN
2
1
YEL
BRN
2 1
CON6
To B MAIN C.B PIN6

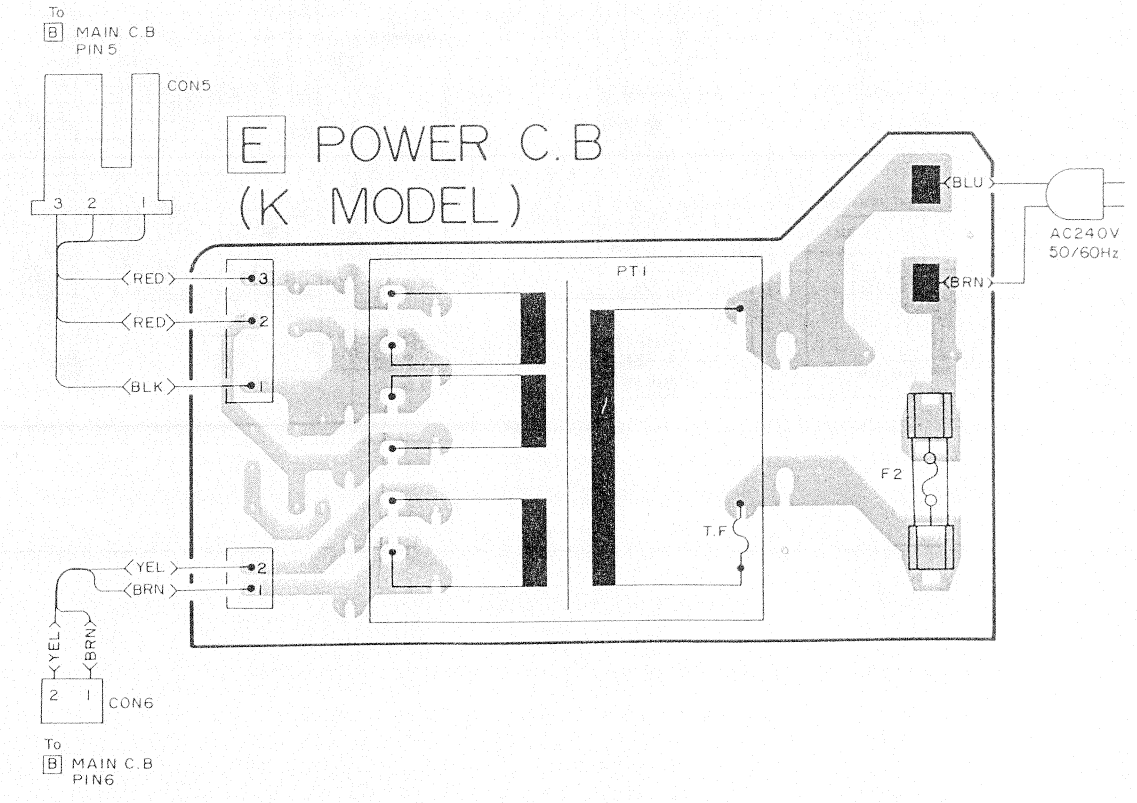
A TUNER C.B (E,EI,K MODEL)


To C FRONT C.B CON21
PIN21
J21
J21 MW/LW LOOP
J20 ANTENNA
FM 75Ω (COAXIAL)
FM 75Ω
IC101
IC102
PIN22
PIN20
TP OUT
To B MAIN C.B PIN 11 VIA CON20
CON20
PIN22
To C FRONT C.B CON22

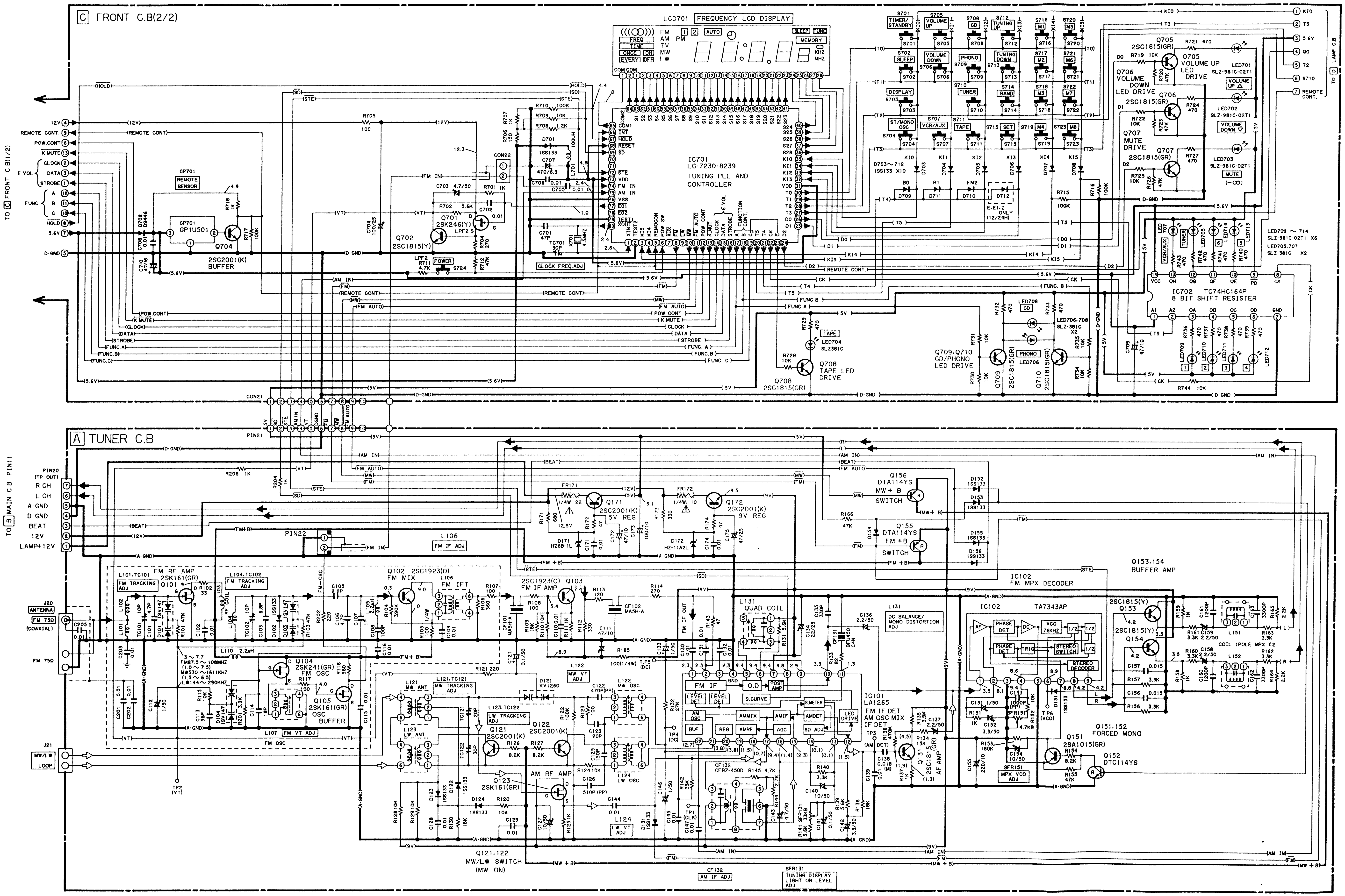
E POWER C.B (E,EI,Z MODEL)


To B MAIN C.B PIN5
CON5
RED
RED
BLK
Z ONLY
C575
C576
PT1
BLU
BRN
AC220V 50/60Hz
F2
T.F
YEL
BRN
CON6
To B MAIN C.B PIN6

E POWER C.B (K MODEL)


To B MAIN C.B PIN5
CON5
RED
RED
BLK
PT1
BLU
BRN
AC240V 50/60Hz
F2
T.F
YEL
BRN
CON6
To B MAIN C.B PIN6

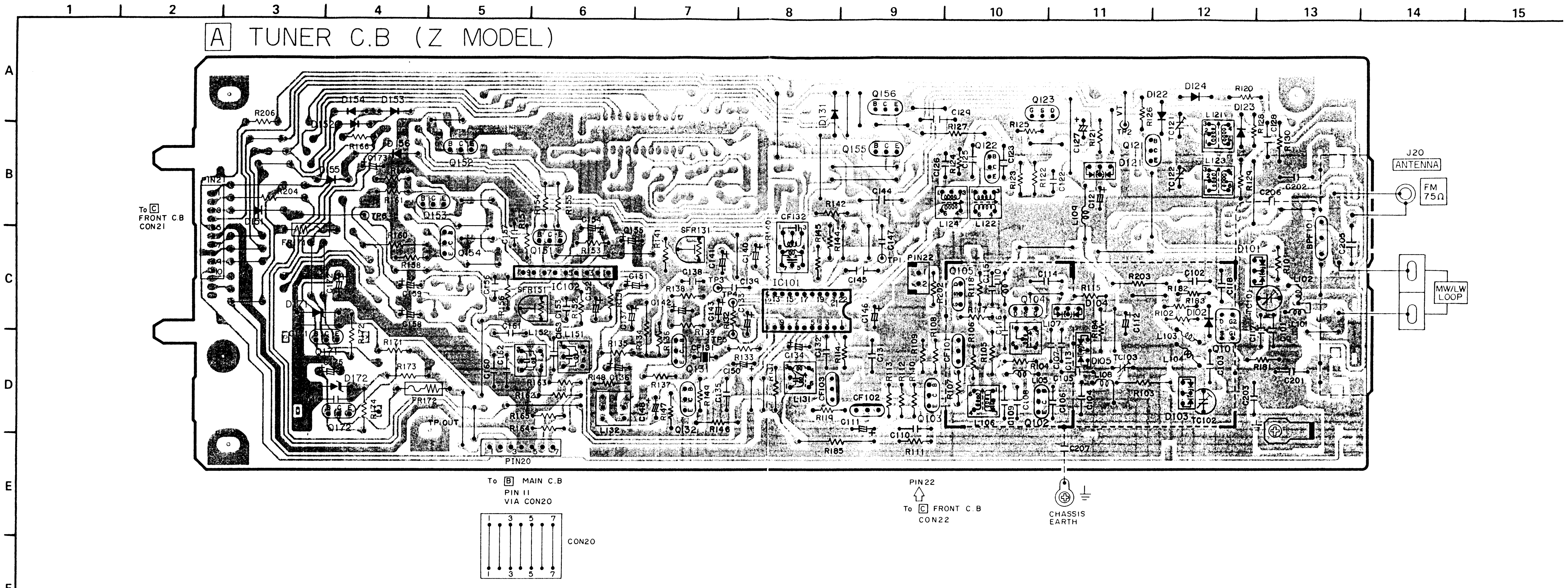
SCHEMATIC DIAGRAM – 3 (E,EI,K)



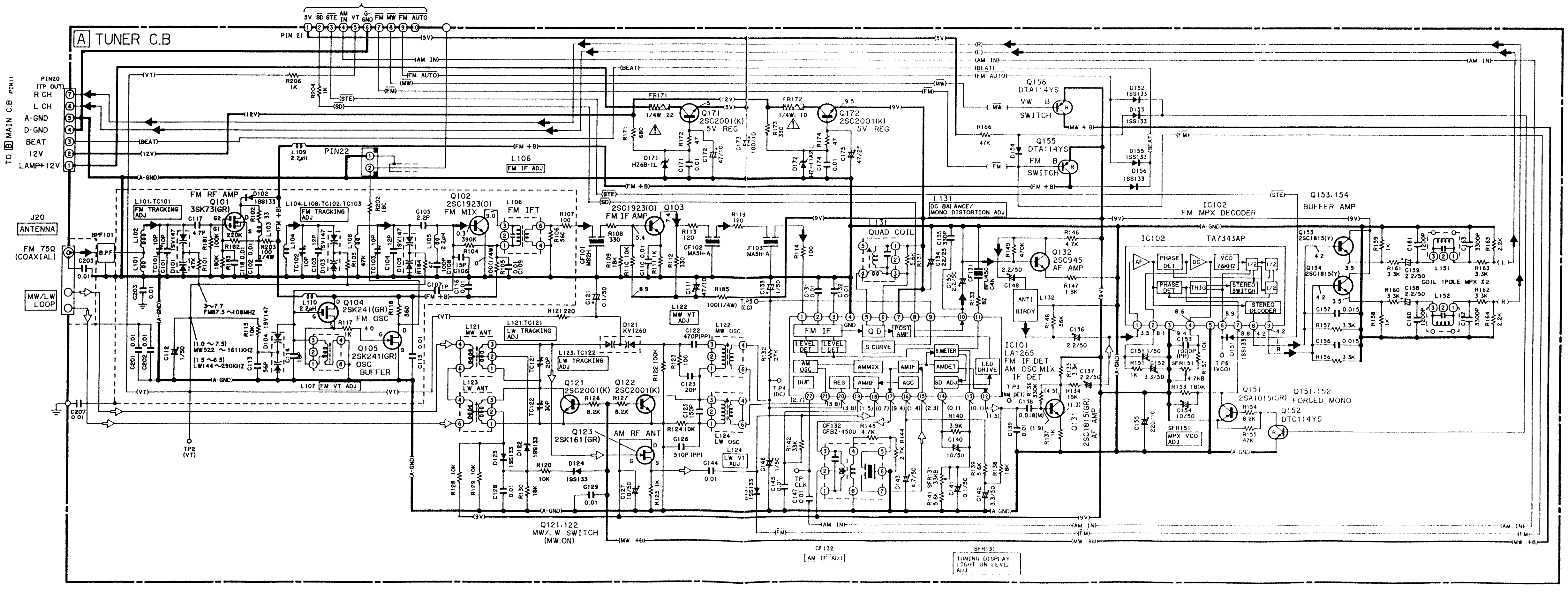
C FRONT C.B(2/2)
LCD701 FREQUENCY LCD DISPLAY
FREQ TIME ONCE ON EVERY OFF
FM AM PM TV MW LW
AUTO SLEEP TUNE MEMORY KHZ MHZ
IC701 LC-7230-8239 TUNING PLL AND CONTROLLER
CP701 REMOTE SENSOR
CP701 GP1U501
Q704 2SC2001(K) BUFFER
Q701 2SK246(Y)
Q702 2SC1815(Y)
POWER S724
CLOCK FREQ.ADJ
CON22
CON21
TO C FRONT C.B(1/2)
12V
REMOTE CONT.
POW.CONT
K.MUTE
CLOCK
E.VOL DATA
STROBE
FUNC. A B C
HOLD
5.6V
D-GND
S701 TIMER/STANDBY
S705 VOLUME UP
S708 CD
S712 TUNING UP
S716 M1
S720 M5
S702 SLEEP
S706 VOLUME DOWN
S709 PHONO
S713 TUNING DOWN
S717 M2
S721 M6
S703 DISPLAY
S710 TUNER
S714 BAND
S718 M3
S722 M7
S704 ST/MONO OSC
S707 VCR/AUX
S711 TAPE
S715 SET
S719 M4
S723 M8
D703~712 1SS133 X10
E·E1.Z ONLY (12/24H)
Q705 2SC1815(GR)
Q705 VOLUME UP LED DRIVE
Q706 VOLUME DOWN LED DRIVE
Q706 2SC1815(GR)
Q707 MUTE DRIVE
Q707 2SC1815(GR)
LED701 SLZ-981C-02T1 VOLUME UP
LED702 SLZ-981C-02T1 VOLUME DOWN
LED703 SLZ-981C-02T1 MUTE (-∞)
LED709 ~ 714 SLZ-981C-02T1 X6
LED705.707 SLZ-381C X2
IC702 TC74HC164P 8 BIT SHIFT RESISTER
LED708 CD
LED706.708 SLZ-381C X2
LED704 SLZ381C TAPE
Q708 TAPE LED DRIVE 2SC1815(GR)
Q709.Q710 CD/PHONO LED DRIVE
Q709 2SC1815(GR)
Q710 2SC1815(GR)
LED706 PHONO
TO D LAMP C.B
KIO T3 5.6V QG T2 S710 REMOTE CONT.
PIN21
A TUNER C.B
TO B MAIN C.B PIN11
PIN20 (TP OUT)
R CH
L CH
A-GND
D-GND
BEAT
12V
LAMP+12V
J20 ANTENNA FM 75Ω (COAXIAL)
FM 75Ω
J21 MW/LW LOOP
PIN22
L106 FM IF ADJ
FR171
Q171 2SC2001(K) 5V REG
FR172
Q172 2SC2001(K) 9V REG
D171 HZ6B-1L
D172 HZ-11A2L
Q156 DTA114YS MW+B SWITCH
Q155 DTA114YS FM+B SWITCH
D152 1SS133
D153 1SS133
D155 1SS133
D156 1SS133
Q153.154 BUFFER AMP
L101.TC101 FM TRACKING ADJ
FM RF AMP 2SK161(GR) Q101
L104.TC102 FM TRACKING ADJ
Q102 2SC1923(O) FM MIX
L106 FM IFT
2SC1923(O) Q103 FM IF AMP
CF101 MA5H-A
CF102 MA5H-A
FM87.5~108MHZ
MW530~1611KHZ
LW144~290KHZ
Q104 2SK241(GR) FM OSC
Q105 2SK161(GR) OSC BUFFER
L107 FM VT ADJ
FM OSC
L110 2.2μH
L121 MW ANT
L121.TC121 MW TRACKING ADJ
L123.TC122 LW TRACKING ADJ
L123 LW ANT
Q121 2SC2001(K)
Q122 2SC2001(K)
Q123 2SK161(GR)
AM RF AMP
Q121.122 MW/LW SWITCH (MW ON)
D121 KV1260
L122 MW VT ADJ
L122 MW OSC
L124 LW OSC
L124 LW VT ADJ
TP2 (VT)
L131 QUAD COIL
L131 DC BALANCE/MONO DISTORTION ADJ
IC101 LA1265 FM IF DET AM OSC MIX IF DET
FM IF
Q.D
POST AMP
LEVEL DET
S.CURVE
S.METER
AMMIX
AM OSC
AMIF
AMDET
LED DRIVE
BUF
REG
AMRF
AGC
SD ADJ
CF132 CFBZ-450D
CF132 AM IF ADJ
SFR131 TUNING DISPLAY LIGHT ON LEVEL ADJ
Q131 2SC1815(GR) AF AMP
TP1 (CLK)
TP3 (AM DET)
TP4 (DC)
T.P5 (DC)
IC102 FM MPX DECODER
IC102 TA7343AP
AF PHASE DET DC VCO 76KHZ 1/2 1/2
PHASE DET TRIG STEREO SWITCH 1/2
STEREO DECODER
T.P6 (VCO)
SFR151 MPX VCO ADJ
Q151.152 FORCED MONO
Q151 2SA1015(GR)
Q152 DTC114YS
2SC1815(Y) Q153
2SC1815(Y) Q154
L151 L152 COIL 1POLE MPX X2

WIRING – 4, SCHEMATIC DIAGRAM – 4 (Z)

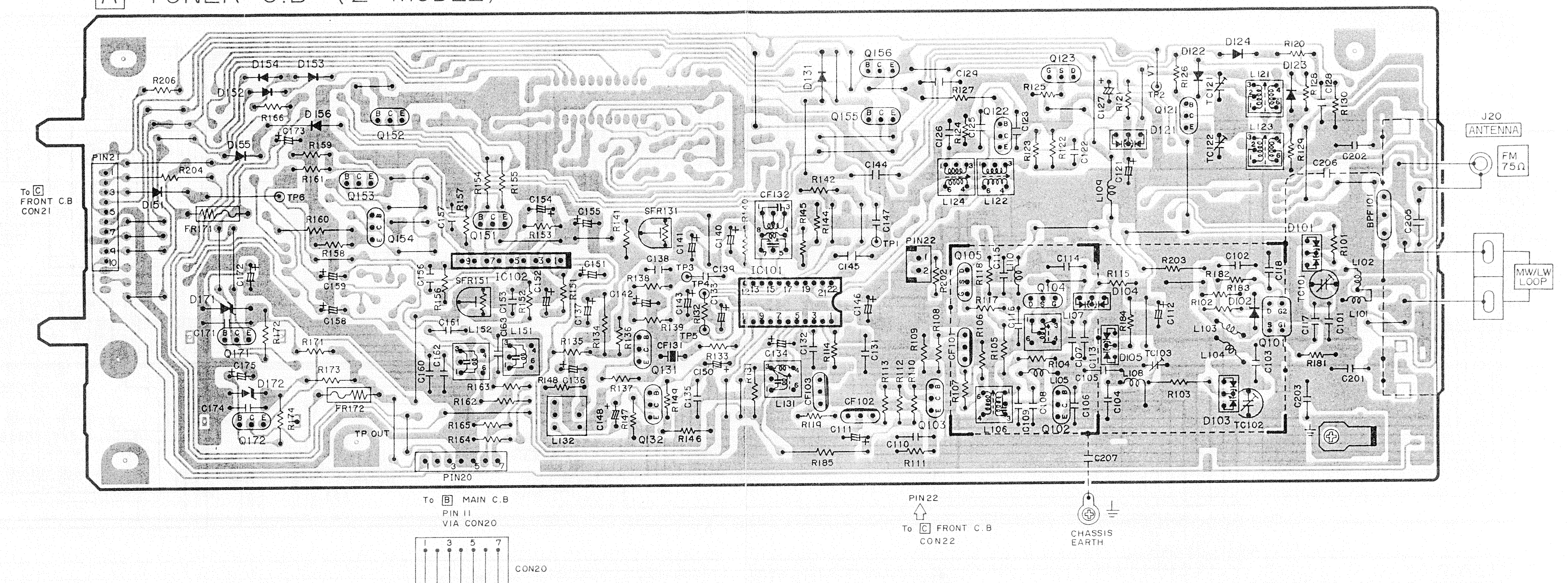
A TUNER C.B (Z MODEL)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
To C FRONT C.B CON21
PIN21
PIN20
To B MAIN C.B PIN 11 VIA CON20
CON20
1 3 5 7
PIN22
To C FRONT C.B CON22
CHASSIS EARTH
J20 ANTENNA
FM 75Ω
MW/LW LOOP
IC101
IC102
SFR131
SFR151
CF132
CF102
CF103
TP1
TP2
TP3
TP4
TP5
TP6
TP.OUT
Q101
Q102
Q103
Q104
Q105
Q121
Q122
Q123
Q131
Q132
Q151
Q152
Q153
Q154
Q155
Q156
Q171
Q172
D101
D102
D103
D104
D105
D121
D122
D123
D124
D153
D154
D171
D172
L101
L102
L103
L104
L105
L106
L107
L121
L122
L123
L124
L131
L132
L151
L152
BPF101
FR171
FR172
C206
C202
C207
C201
C203
C204

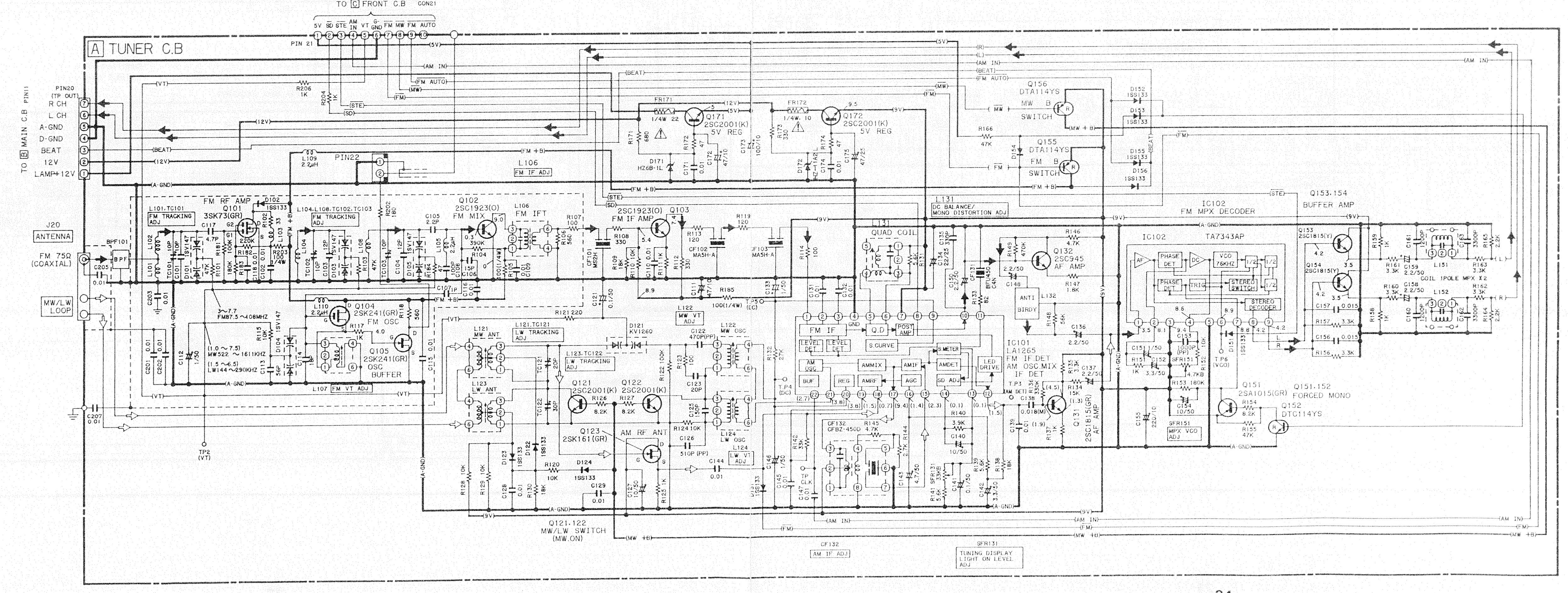
•REFER TO SCHEMATIC DIAGRAM (E,E1,K)

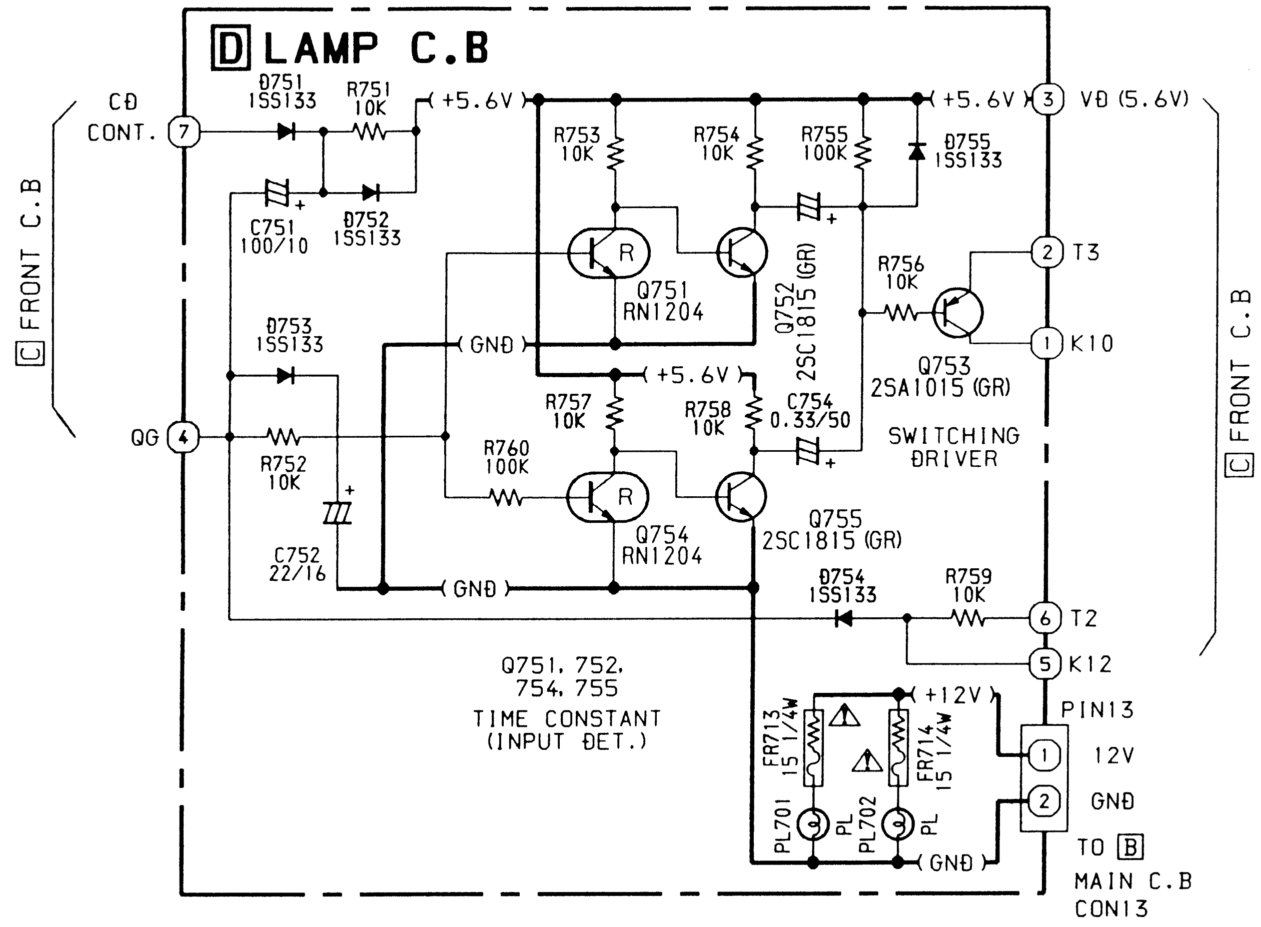

TO C FRONT C.B CON21
5V
BD
STE
AM IN
VT
G-GND
FM
MW
FM AUTO
PIN 21
A TUNER C.B
TO B MAIN C.B PIN11
PIN20 (TP OUT)
R CH
L CH
A·GND
D·GND
BEAT
12V
LAMP+12V
J20 ANTENNA
FM 75Ω (COAXIAL)
MW/LW LOOP
PIN22
L109 2.2μH
FM RF AMP Q101 3SK73(GR)
L101,TC101 FM TRACKING ADJ
L104,L108,TC102,TC103 FM TRACKING ADJ
Q102 2SC1923(O) FM MIX
L106 FM IFT
L106 FM IF ADJ
2SC1923(O) Q103 FM IF AMP
CF102 MASH-A
CF103 MASH-A
Q104 2SK241(GR) FM OSC
Q105 2SK241(GR) OSC BUFFER
(1.0～7.5) MW522～1611KHZ
(1.5～6.5) LW144～290KHZ
(1.0～7.7) FM87.5～108MHZ
L107 FM VT ADJ
L121.TC121 MW ANT
L121.TC121 LW TRACKING ADJ
L123 LW ANT
L123.TC122 LW TRACKING ADJ
Q121 2SC2001(K)
Q122 2SC2001(K)
Q123 2SK161(GR) AM RF ANT
Q121·122 MW/LW SWITCH (MW.ON)
D121 KV1260
L122 MW VT ADJ
L122 MW OSC
L124 LW OSC
L124 LW VT ADJ
TP2 (VT)
FR171 1/4W 22
Q171 2SC2001(K) 5V REG
FR172 1/4W 10
Q172 2SC2001(K) 5V REG
D171 HZ6B-1L
L131 DC BALANCE/ MONO DISTORTION ADJ
L131 QUAD COIL
IC101 LA1265 FM IF DET AM OSC MIX IF DET
FM IF
LEVEL DET
Q.D
POST AMP
S CURVE
S METER
AMMIX
AMIF
AGC
AMDET
SD ADJ
LED DRIVE
BUF
REG
AMIO
AM OSC
CF132 CFB2·450G
CF132 AM IF ADJ
SFR131 TUNING DISPLAY LIGHT ON LEVEL ADJ
Q132 2SC945 AF AMP
Q131 2SC1815(GR) AF AMP
ANTI BIRDY
L132
Q156 DTA114YS MW B SWITCH
Q155 DTA114YS FM B SWITCH
D152 1SS133
D153 1SS133
D155 1SS133
D156 1SS133
IC102 FM MPX DECODER
IC102 TA7343AP
PHASE DET
VCO 76KHZ
TRIG
STEREO SWITCH
STEREO DECODER
SFR151 MPX VCO ADJ
TP6 (VCO)
Q153·154 BUFFER AMP
Q153 2SC1815(Y)
Q154 2SC1815(Y)
L151
L152
COIL 1POLE MPX X2
Q151 2SA1015(GR)
Q151·152 FORCED MONO
Q152 DTC114YS
(5V)
(12V)
(9V)
(8V)
(R)
(L)
(AM IN)
(BEAT)
(FM AUTO)
(FM)
(MW)
(STE)
(SD)
(VT)
(A·GND)
(FM +B)
(MW +B)

A TUNER C.B (Z MODEL)


PIN21
To C FRONT C.B CON21
PIN20
TP OUT
TP6
TP1
PIN22
J20 ANTENNA
FM 75Ω
MW/LW LOOP
IC101
IC102
SFR131
SFR151
CF132
CF131
CF102
BPF101
C207
To B MAIN C.B PIN 11 VIA CON20
1 3 5 7
CON20
PIN22
To C FRONT C.B CON22
CHASSIS EARTH

●REFER TO SCHEMATIC DIAGRAM(E,E1,K)


A TUNER C.B
TO C FRONT C.B CON21
5V SD STE AM IN VT GND FM MW FM AUTO
PIN 21
PIN20 (TP OUT)
R CH
L CH
A-GND
D-GND
BEAT
12V
LAMP+12V
TO B MAIN C.B PIN11
J20 ANTENNA
FM 75Ω (COAXIAL)
MW/LW LOOP
FM RF AMP
Q101 3SK73(GR)
Q102 2SC1923(O) FM MIX
Q103 2SC1923(O) FM IF AMP
Q104 2SK241(GR) FM OSC
Q105 2SK241(GR) OSC BUFFER
FM TRACKING ADJ
L106 FM IF ADJ
L107 FM VT ADJ
L131 DC BALANCE/ MONO DISTORTION ADJ
QUAD COIL
Q171 2SC2001(K) 5V REG
Q172 2SC2001(K) 5V REG
Q156 DTA114YS MW B SWITCH
Q155 DTA114YS FM B SWITCH
Q153·154 BUFFER AMP
IC102 FM MPX DECODER
IC102 TA7343AP
IC101 LA1265 FM IF DET AM OSC.MIX IF DET
Q132 2SC945 AF AMP
Q131 2SC1815(GR) AF AMP
Q121 2SC2001(K)
Q122 2SC2001(K)
Q121·122 MW/LW SWITCH (MW.ON)
Q123 2SK161(GR) AM RF ANT
L121 MW ANT
L123 LW ANT
L121, TC121 LW TRACKING ADJ
L123, TC122 LW TRACKING
L122 MW VT ADJ
L124 LW VT ADJ
Q151 2SA1015(GR)
Q151·152 FORCED MONO
Q152 DTC114YS
SFR151 MPX VCO ADJ
CF132 AM IF ADJ
SFR131 TUNING DISPLAY LIGHT ON LEVEL ADJ
COIL 1POLE MPX X2


D LAMP C.B
C FRONT C.B
CD CONT.
7
QG
4
D751 1SS133
R751 10K
+5.6V
D752 1SS133
C751 100/10
D753 1SS133
R752 10K
C752 22/16
GND
R753 10K
R754 10K
R755 100K
D755 1SS133
Q751 RN1204
Q752 2SC1815 (GR)
R756 10K
Q753 2SA1015 (GR)
R757 10K
R758 10K
C754 0.33/50
R760 100K
Q754 RN1204
Q755 2SC1815 (GR)
SWITCHING DRIVER
D754 1SS133
R759 10K
Q751, 752, 754, 755
TIME CONSTANT (INPUT DET.)
+12V
FR713 15 1/4W
FR714 15 1/4W
PL701 PL
PL702 PL
3 VD (5.6V)
2 T3
1 K10
6 T2
5 K12
PIN13
1 12V
2 GND
TO B MAIN C.B CON13
C FRONT C.B

PRACTICAL SERVICE FIGURE

〈TUNER SECTION〉

〈FM SECTION〉

IHF Sensitivity :	E,E1,K Models
(THD 3%)	2±4dB (at 87.5, 98.0, 108.0MHz)
(S/N 26dB,	Z Model
Use DIN FILTER)	4±4dB (at 87.5MHz)
	2±4dB (at 98.0, 108.0MHz)
S/N 50dB Quieting Sensitivity :	
	E,E1,K Models
	28±6dB (at 87.5, 98.0, 108.0MHz)
S/N 46dB Quieting Sensitivity :	
	Z Model
	28±6dB (at 87.5, 98.0, 108.0MHz)
Intermediate Frequency:	10.7MHz
Signal to Noise Ratio :	(MONO.)
	More than 68dB (at 98.0MHz)
	(STEREO)
	E,E1,K Models
	More than 62dB (at 98.0MHz)
	Z Model
	More than 60dB (at 98.0MHz)
Total Harmonic Distortion :	
	(MONO.)
	Less than 0.8% (at 98.0MHz)
	(STEREO)
	Less than 1.5% (at 98.0MHz)
Stereo Separation :	More than 25dB (at 98.0MHz)

〈MW SECTION〉

Sensitivity :	55±5dB (at 603kHz)
(S/N 20dB)	52±5dB (at 999kHz)
	51±5dB (at 1404kHz)
Intermediate Frequency:	450kHz

〈LW SECTION〉

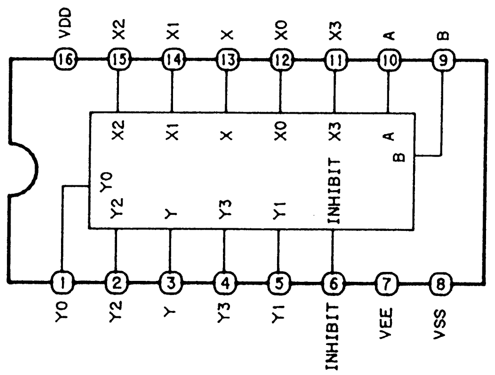
Sensitivity :	64±5dB (at 162, 198, 290kHz)
(S/N 20dB)	
Intermediate Frequency:	450kHz

〈CASSETTE DECK SECTION〉

PB Output Level :	More than 3.2V (SP out) TTS-200 (TCC-130, TTA-161)
REC/PB Output Level (AUX 1kHz):	2.7V±2dB (SP out)
Distortion (REC/PB) :	Less than 3% (NORM.)
Noise (PB) :	Less than 30mV 〔DOLBY B NR ON NORM. DECK1(E,Z), DECK2(E1,K), PB〕 Less than 50mV 〔DOLBY B NR ON NORM. DECK2(E,Z), DECK1(E1,K), REC/PB〕
Erasing Ratio :	More than 57dB (125Hz)
Channel Separation :	More than 28dB (1kHz, 0VU)
Recording Bias Frequency :	100kHz
Wow & Flutter (W-RMS):	Less than 0.25% (DECK1, 2)
Tape Speed :	3000Hz±3% 〔TTA-100 (TTA-111S)〕
Take-up Torque :	30〜60 g-cm (DECK1, 2) (0.3〜0.59mN·m)
F.F & REW Torque :	55〜140 g-cm (DECK1, 2) (0.54〜1.37mN·m)
Back Tension :	2〜5 g-cm (DECK1, 2) (0.02〜0.05mN·m)
Test Tape :	NORMAL TTA-600 (TTA-119K) CrO_2 TTA-610 (TTA-119H)

IC BLOCK DIAGRAM

IC, HD14052BP

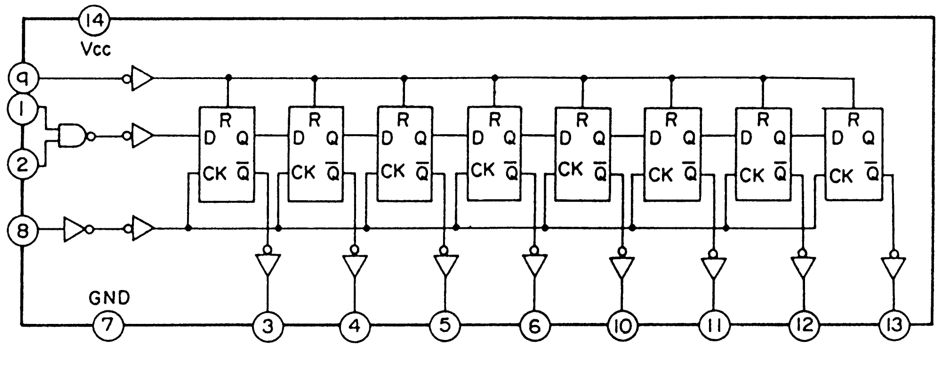

VDD
X2
X1
X
X0
X3
A
B
16
15
14
13
12
11
10
9
Y0
Y2
Y
Y3
Y1
INHIBIT
1
2
3
4
5
6
7
8
Y0
Y2
Y
Y3
Y1
INHIBIT
VEE
VSS

TRUTH TABLE

CONTROL INPUTS			ON SWITCH	
INHIBIT	B	A		
L	L	L	Y0	X0
L	L	H	Y1	X1
L	H	L	Y2	X2
L	H	H	Y3	X3
H	X	X	—	—

L : LOW LEVEL
H : HIGH LEVEL
X : IRRELEVANT

IC, TC74HC164AP

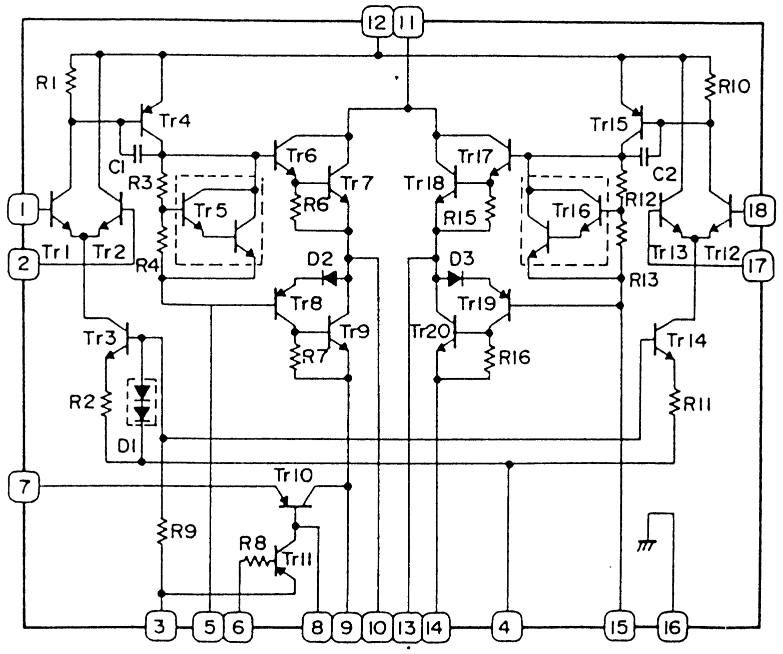

14
Vcc
9
1
2
8
R
D Q
CK Q̄
GND
7
3
4
5
6
10
11
12
13

TRUTH TABLE

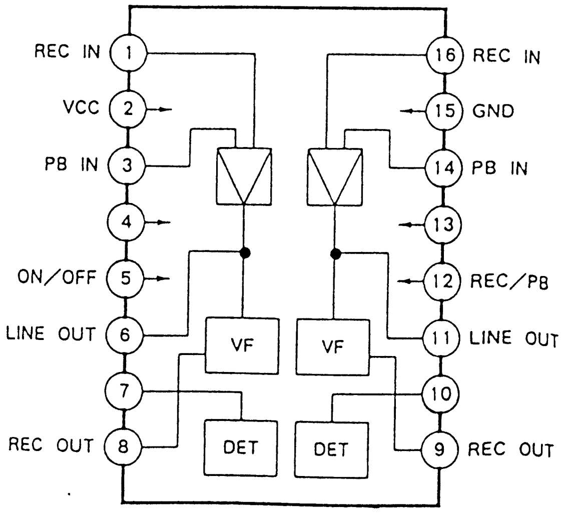
INPUTS				OUTPUTS			
$\overline{CLR}$	CK	SERIAL IN		QA	QB	···	QH
		A	B				
L	X	X	X	L	L	···	L
H	↓	X	X	NO CHANGE			
H	↑	L	X	L	QAn	···	QGn
H	↑	X	L	L	QAn	···	QGn
H	↑	H	H	H	QAn	···	QGn

X : Don't Care

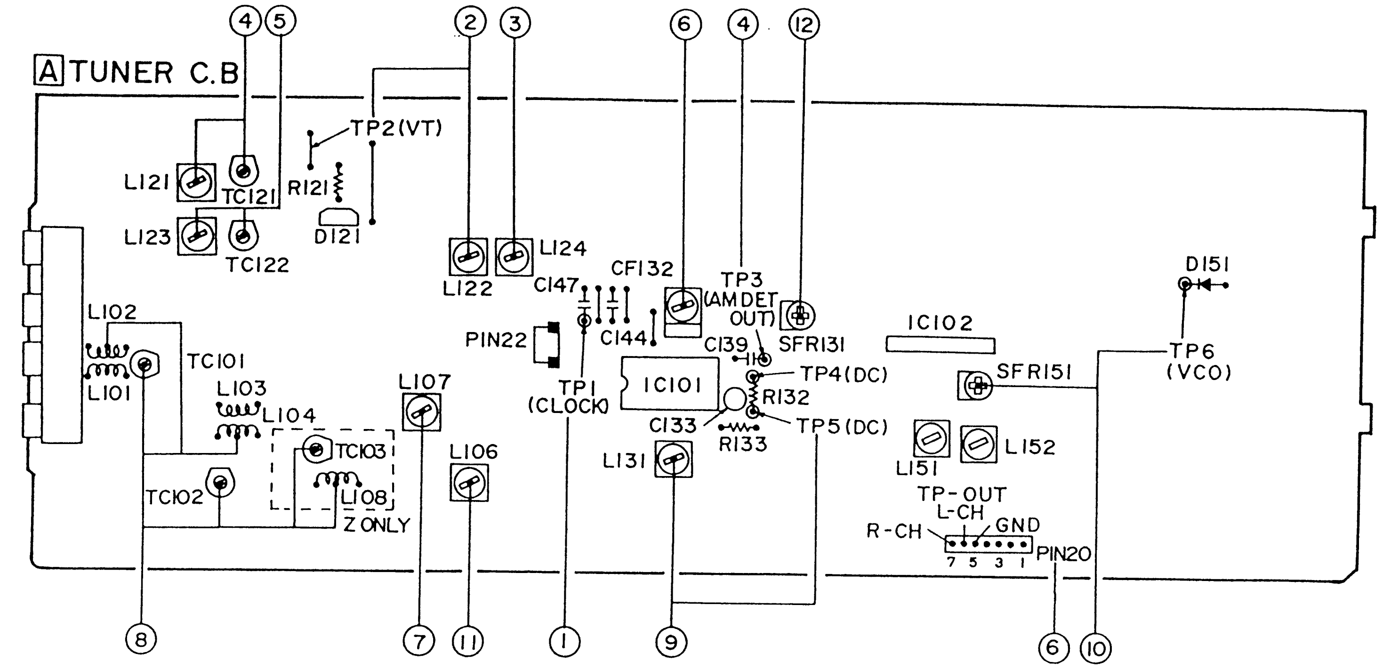
IC, STK4152Ⅱ(E,E1,K), STK4142Ⅱ(Z)

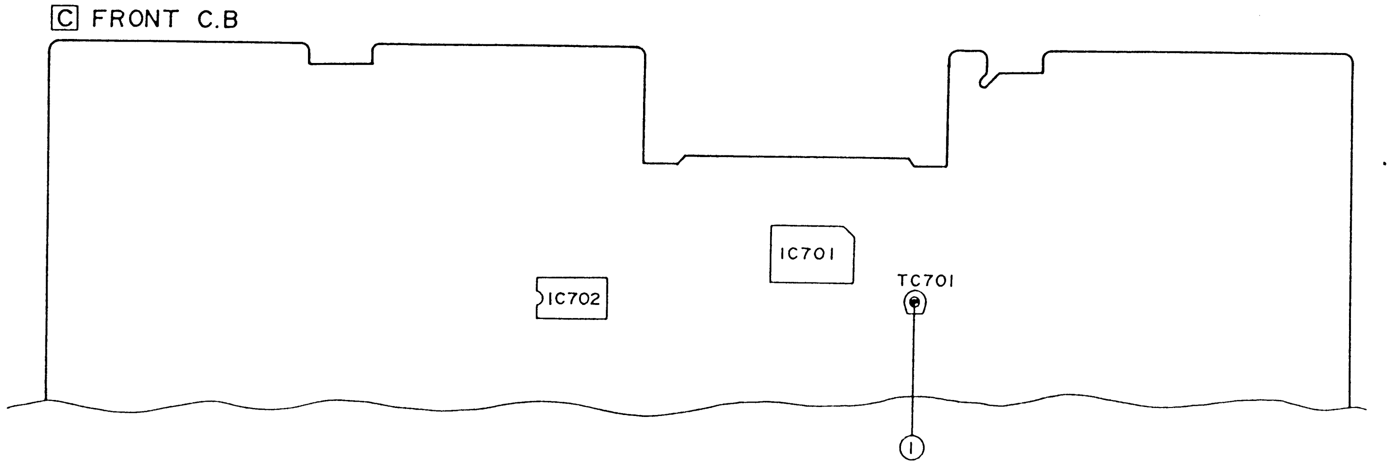

12
11
R1
Tr4
C1
R3
Tr5
Tr6
R6
Tr7
Tr1
Tr2
R4
D2
Tr8
Tr9
R7
Tr3
R2
D1
Tr10
R9
R8
Tr11
Tr15
R10
Tr17
Tr18
C2
R15
Tr16
R12
Tr13
Tr12
R13
D3
Tr19
Tr20
R16
Tr14
R11
1
2
7
18
17
3
5
6
8
9
10
13
14
4
15
16

IC, CX1102


REC IN 1
VCC 2
PB IN 3
4
ON/OFF 5
LINE OUT 6
7
REC OUT 8
16 REC IN
15 GND
14 PB IN
13
12 REC/PB
11 LINE OUT
10
9 REC OUT
VF
VF
DET
DET

ADJUSTMENT


A TUNER C.B
④⑤ ②③ ⑥ ④ ⑫
TP2(VT)
L121
TC121
R121
L123
TC122
D121
L122
L124
CF132
C147
TP3
(AM DET OUT)
PIN22
C144
C139
SFR131
IC102
D151
L102
TC101
L101
L103
L104
L107
TP1
(CLOCK)
IC101
TP4(DC)
R132
C133
R133
TP5(DC)
SFR151
TP6
(VCO)
TC103
L108
Z ONLY
L106
L131
L151
L152
TC102
TP-OUT
L-CH
R-CH
GND
7 5 3 1
PIN20
⑧ ⑦ ⑪ ① ⑨ ⑥ ⑩


C FRONT C.B
IC701
IC702
TC701
①

(TUNER SECTION)

1. Clock Frequency Adjustment
   Settings : · Test point : TP1
   · Adjustment location : TC701
   Method : Set to AM, 1611kHz and adjust so that the test point becomes 2061kHz±0.01kHz.

2. MW VT Adjustment
   Settings : · Test point : TP2
   · Adjustment location : L122
   Method : Set to MW, 522kHz and adjust so that the test point becomes 1.0V±0.05V.

3. LW VT Adjustment
   Settings : · Test point : TP2
   · Adjustment location : L124
   Method : Set to LW, 144kHz and adjust so that the test point becomes 1.5V±0.05V.

4. MW Tracking Adjustment
   Settings : · Test point : TP3
   L121 · · · · · · · · · · · · · · · · · · 603kHz
   TC121 · · · · · · · · · · · · · · · · · · 1404kHz
   Method : Adjust so that the output level at test point becomes maximum.

5. LW Tracking Adjustment
   Settings : · Test point : TP3
   L123 · · · · · · · · · · · · · · · · · · 144kHz
   TC122 · · · · · · · · · · · · · · · · · · 290kHz
   Method : Adjust so that the output level at test point becomes maximum.

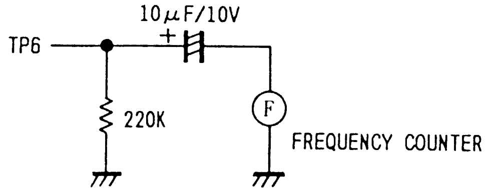
6. AM IF Adjustment
   Settings : · Test point : TP-OUT (PIN20)
   CF132 · · · · · · · · · · · · · · · · · · 450kHz

7. FM VT Adjustment
   Settings : · Test point : TP2
   · Adjustment location : L107
   Method : Set to FM, 87.5MHz and adjust so that the test point becomes 3.0V±0.05V.

8. FM Tracking Adjustment
   Settings : · Test point : TP-OUT (PIN20)
   L102, L104, L108(Z) · · · · · · · · · · · 87.5MHz
   TC101, TC102, TC103(Z) · · · · · · · · · 108MHz
   Method : Adjust so that the output level at test point becomes maximum.

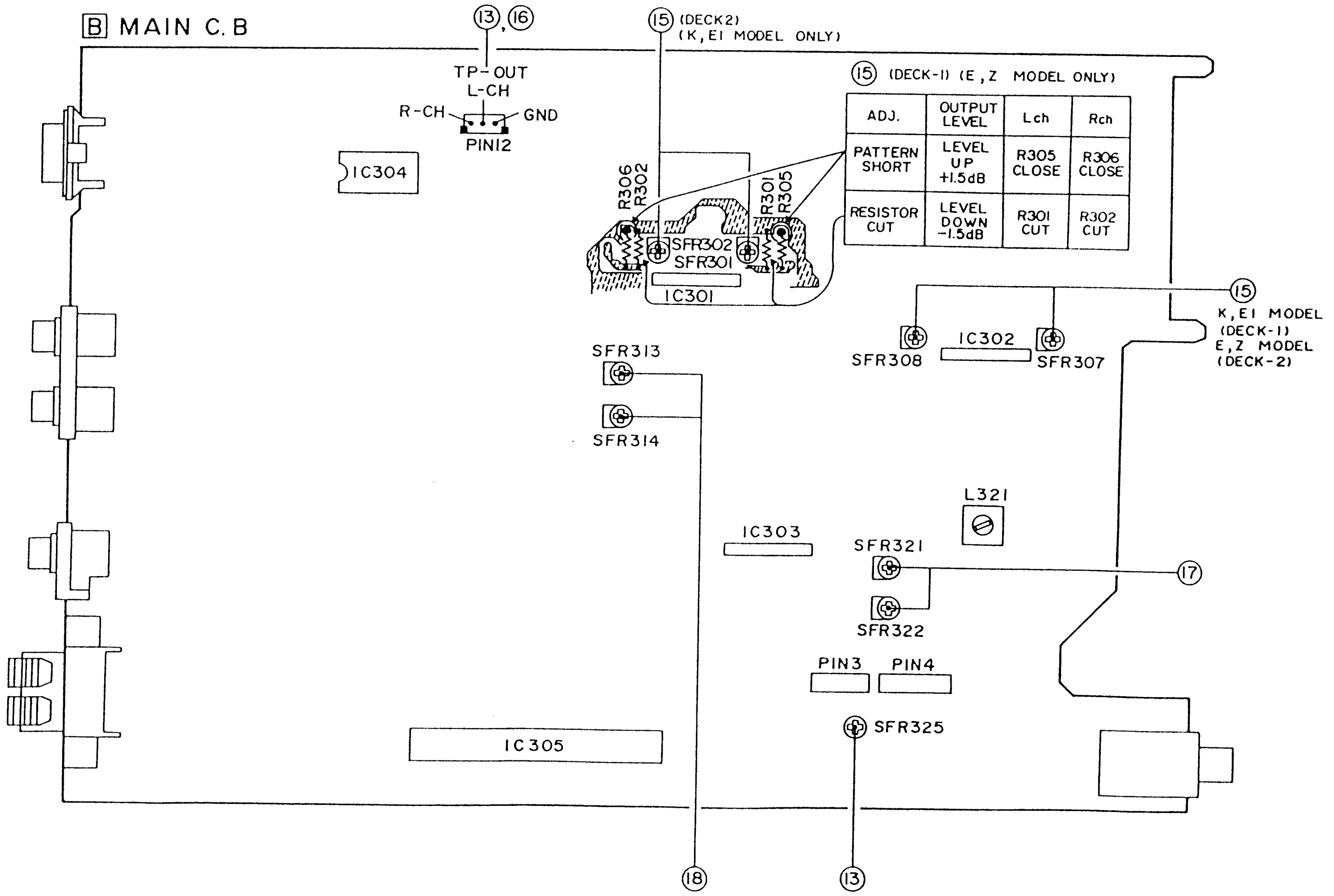
9. DC Balance/MONO Distortion Adjustment
   Settings : · Test point : TP4, TP5 (DC balance)
   TP-OUT (PIN20)(Distortion)
   · Adjustment location : L131
   Method : Set to FM, 98.0MHz and adjust L131 so that TP4 and TP5 output becomes 0V±0.02V. Next, adjust L131 so that the distortion becomes minimum (less than 0.8%).

10. MPX VCO Adjustment
    Settings : · Test point : TP6
    · MODE SW : STEREO
    · Adjustment location : SFR151
    Method : Connect a capacitor and a resistor as below. Set to FM, 98.0MHz and adjust so that the frequency at test point becomes 38kHz±0.05 kHz.


10μF/10V
TP6
220K
F
FREQUENCY COUNTER

11. FM IF Adjustment
    Settings : · Test point : TP-OUT (PIN20)
    L106 · · · · · · · · · · · · · · · · · 10.7MHz

12. Tune Display Light on Level Adjustment
    Settings : · Input signal : 18dB, 98.0MHz
    · Adjustment location : SFR131
    Method : Tune display is adjusted by SFR131 as make it light on.


B MAIN C.B
⑬,⑯
⑮ (DECK2)
(K,EI MODEL ONLY)
TP-OUT
L-CH
R-CH
GND
PIN12
IC304
R306
R302
R301
R305
SFR302
SFR301
IC301
IC302
SFR308
SFR307
⑮
K,EI MODEL
(DECK-1)
E,Z MODEL
(DECK-2)
SFR313
SFR314
L321
IC303
SFR321
SFR322
⑰
PIN3
PIN4
SFR325
IC305
⑱
⑬

⑮ (DECK-1) (E,Z MODEL ONLY)

ADJ.	OUTPUT LEVEL	Lch	Rch
PATTERN SHORT	LEVEL UP +1.5dB	R305 CLOSE	R306 CLOSE
RESISTOR CUT	LEVEL DOWN -1.5dB	R301 CUT	R302 CUT

(DECK SECTION)

13. Tape Speed Adjustment

Settings : · Test tape : TTA-100 (TTA-111S)
· Test point : TP-OUT (PIN12)
· Adjustment location : SFR325 (DECK-2)

Method : Play back the test tape, adjust for 3000Hz.

14. Head Azimuth Adjustment (DECK-1, DECK-2)

Settings : · Test tape : TTS-310 (TTA-317E)
· Test point : TP-OUT (PIN12)
· Adjustment location : Head azimuth adjustment screw

Method : Play back the 10kHz signal of the test tape and adjust so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode (DECK-2···K, E1 MODEL).

15. PB Sensitivity Adjustment (DECK-1, DECK-2)

Settings : · Test tape : TTS-200 (TTA-161, TCC-130)
· Test point : TP-OUT (PIN12)
· Adjustment location : K, E1 MODEL
SFR307 (DECK-1,Lch)
SFR308 (DECK-1,Rch)
SFR301 (DECK-2,Lch)
SFR302 (DECK-2,Rch)
E, Z MODEL
R301,305 (DECK-1,Lch)
R302,306 (DECK-1,Rch)
SFR307 (DECK-2,Lch)
SFR308 (DECK-2,Rch)

Method : Play back the test tape and adjust so that the output becomes 385mV.

16. PB Frequency Response Check (DECK-1, DECK-2)

Settings : · Test tape : TTS-310 (TTA-317E, SCC-1429)
· Test point : TP-OUT (PIN12)

Method : Play back the test tape and check that the difference in the output levels between the 315Hz and 10kHz signals is within 0dB±2dB and the difference in the sensitivity between the left and right channels at 10kHz is within 2dB.

17. REC/PB Frequency Response Adjustment (DECK-1···K, E1 MODEL)(DECK-2···E, Z MODEL)

Settings : · Test tape : TTA-600 (TTA-119K)
· Test point : TP-OUT (PIN12)
· Dolby NR SW : OFF
· Input signal : VCR/AUX (VCR/AUX VR:MAX)
1kHz, -11.1dB
· Adjustment location : SFR321 (Lch)
SFR322 (Rch)

Method : Set the input signal level so that the voltage at the test point is 270mV and attenuate the level by -20dB. Record and play the 1kHz and 10kHz signals and adjust so that the output of 10kHz signal is 0±1dB for 1kHz signal.

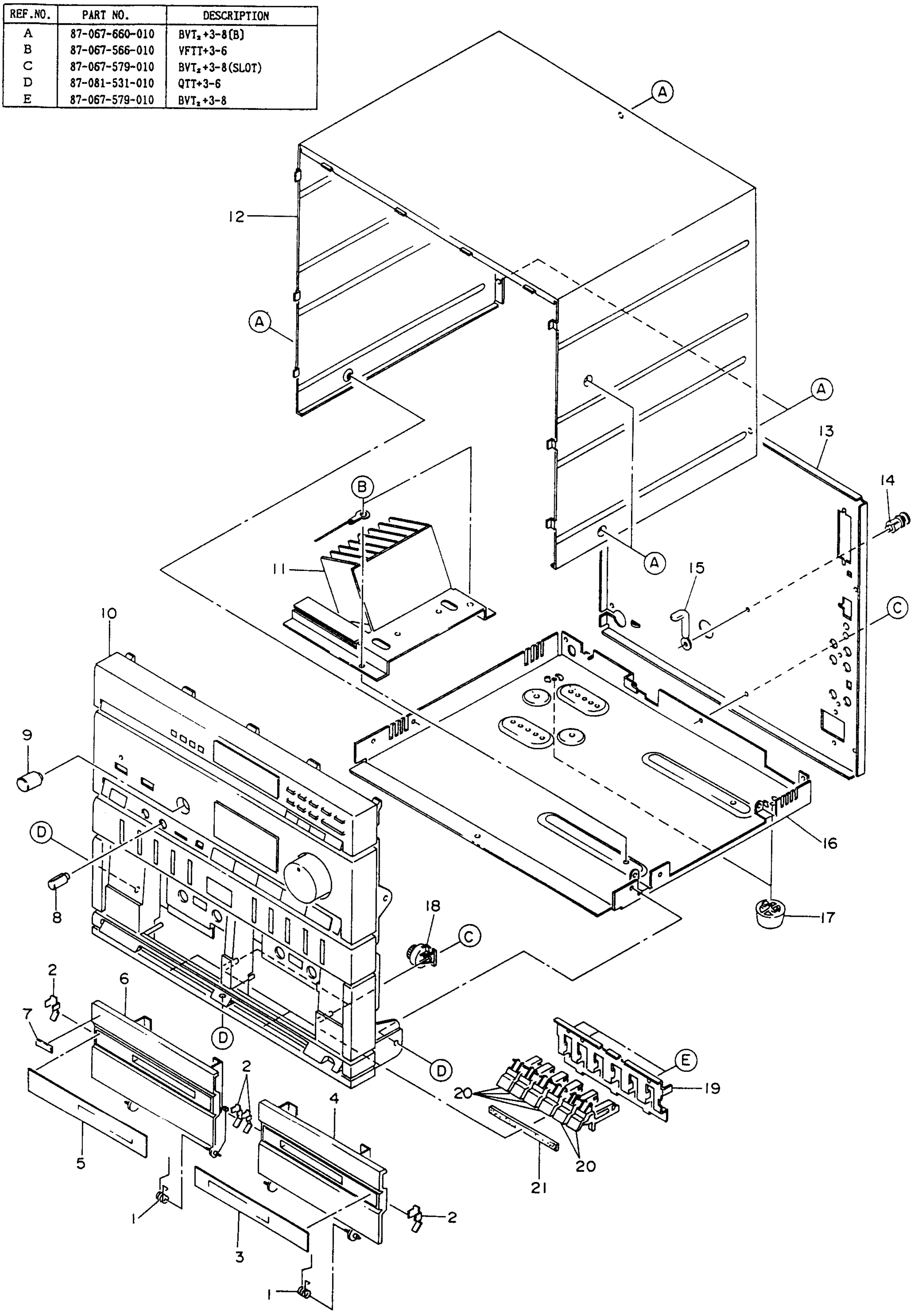
18. REC/PB Sensitivity Adjustment (DECK-1···K, E1 MODEL)(DECK-2···E, Z MODEL)

Settings : · Test tape : TTA-600 (TTA-119K)
· Test point : TP-OUT (PIN12)
· Input signal : VCR/AUX (VCR/AUX VR:MAX)
1kHz, -11.1dB
· Adjustment location : SFR313 (Lch)
SFR314 (Rch)

Method : Set the input signal level so the 1kHz output at the test point is 270mV. Record and play the signal and adjust so that the output is 270mV±1dB.

EXPLODED VIEW – 1

REF.NO.	PART NO.	DESCRIPTION
A	87-067-660-010	BVT_2+3-8(B)
B	87-067-566-010	VFTT+3-6
C	87-067-579-010	BVT_2+3-8(SLOT)
D	87-081-531-010	QTT+3-6
E	87-067-579-010	BVT_2+3-8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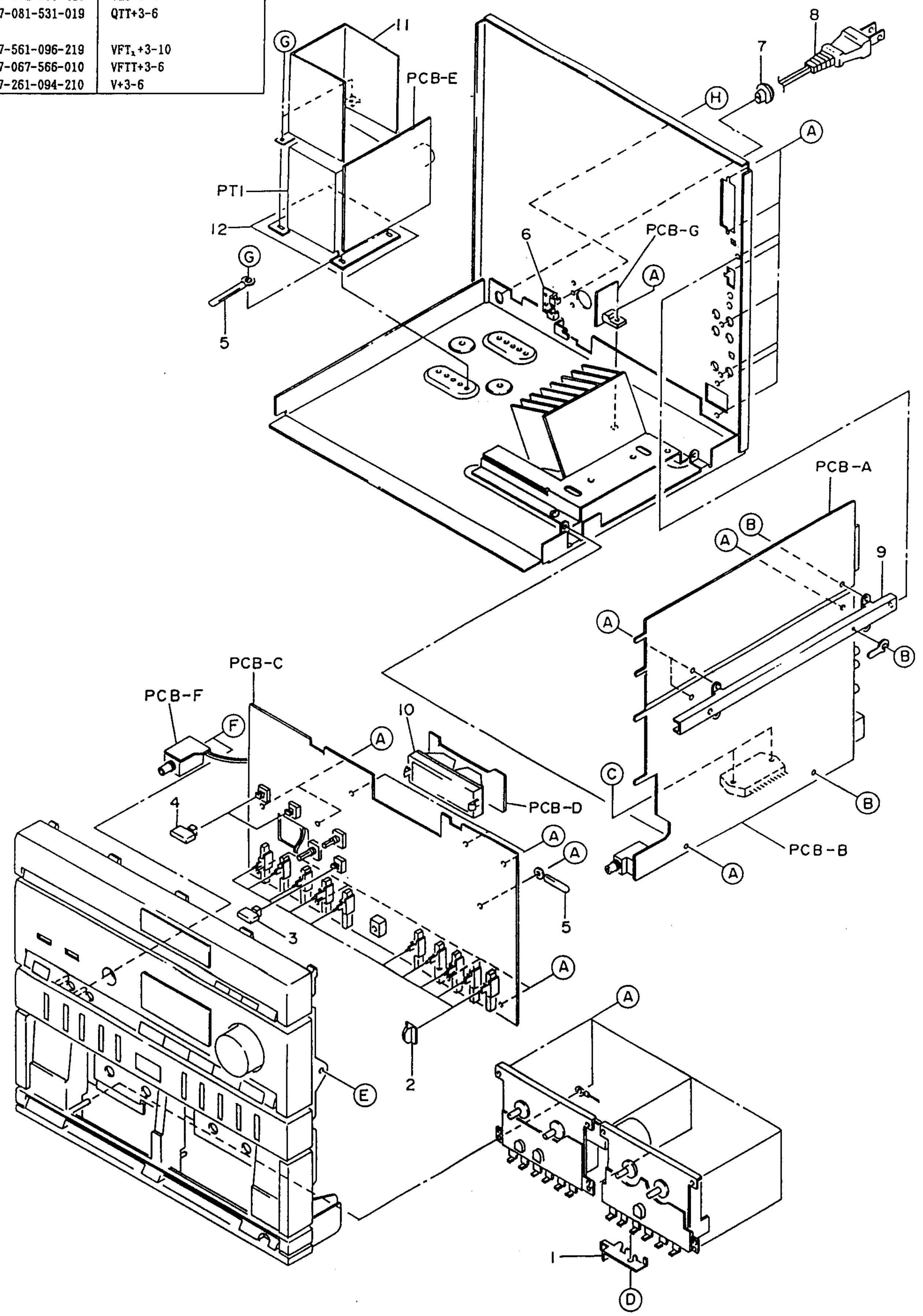
MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1-1	★81-631-209-119	T-SPRING,EJECT		2
	1-2	★81-794-214-010	P-SPRING,CASSETTE BOX		4
	1-3	★83-317-008-019	WINDOW,BOX R(H,U,C,E1,K)	*	1
	1-3	★83-317-028-019	WINDOW,BOX R(E,Z)	*	1
	1-4	83-317-022-019	CASSETTE BOX R(H,U,C,E1,K)	*	1
	1-4	83-317-043-019	CASSETTE BOX R(E,Z)	*	1
	1-5	★83-317-007-019	WINDOW,BOX L	*	1
	1-6	83-317-021-019	CASSETTE BOX L(H,U,C,E1,K)	*	1
	1-6	83-317-042-019	CASSETTE BOX L(E,Z)	*	1
	1-7	★84-764-009-019	BADGE AIWA		1
	1-8	★82-234-018-010	KNOB,BIAS(H)		1
	1-9	★81-689-002-019	KNOB,BALANCE		1
	1-10	★09-047-461-010	CABINET FRONT ASSY(H)	*	1
	1-10	★09-047-462-010	CABINET FRONT ASSY(U,C,K)	*	1
	1-10	★09-047-464-010	CABINET FRONT ASSY(E,E1)	*	1
	1-10	★09-047-463-010	CABINET FRONT ASSY(Z)	*	1
	1-11	---	HEAT,SINK ASSY(H,U,C)		1
	1-12	★83-317-002-119	CABINET,STEEL(H,U,C)	*	1
	1-12	★83-317-026-118	CABINET,STEEL(E,E1,K,Z)	*	1
	1-13	★83-317-003-019	PANEL,REAR(H)	*	1
	1-13	★83-317-048-019	PANEL,REAR(HJ)	*	1
	1-13	★83-317-033-019	PANEL,REAR(U)	*	1
	1-13	★83-317-034-019	PANEL,REAR(C)	*	1
	1-13	★83-317-056-019	PANEL,REAR(E)	*	1
	1-13	★83-317-074-019	PANEL,REAR(E1)	*	1
	1-13	★83-317-037-019	PANEL,REAR(K)	*	1
	1-13	★83-317-038-019	PANEL,REAR(Z)	*	1
	1-14	★87-084-077-019	NYLON RIVET DIA 3.5-4.5		1
	1-15	---	WIRE BINDER		1
	1-16	---	CHASSIS,AMP		1
	1-17	★82-132-010-010	FOOT		2
	1-18	★87-063-143-010	OIL-DUMPER 75		2
	1-19	★83-317-202-019	HOLDER,PUSH	*	2
	1-20	★83-317-017-019	PUSH KEY,DECK(M3)	*	12
	1-21	★81-629-210-019	CUSHION,M,SQ5-105-5		2

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	2-1	★81-597-211-019	HOLDER,WIRE(H,U,C,E1,K)		1
	2-2	★83-317-047-019	KNOB,GE(H)	*	10
	2-3	★83-317-031-019	PUSH BUTTON,H(H,U,C,E1,K)	*	1
	2-4	★83-317-018-019	PUSH BUTTON,D	*	2
	2-5	---	WIRE BINDER		2
	2-6	★83-317-212-019	HOLDER,VS(H,U,C)	*	1
	2-7	★87-085-184-010	BUSHING,AC CORD(H)		1
	2-7	★87-085-189-010	BUSHING,AC CORD(U,C)		1
	2-7	★87-085-185-010	BUSHING,AC CORD(E,E1,K,Z)		1
	2-8	★87-034-590-019	AC CORD(H)		1
	2-8	★87-034-589-019	AC CORD(U,C)		1
	2-8	★87-034-781-018	AC CORD(E,E1,Z)		1
	2-8	★87-034-592-018	AC CORD(K)		1
	2-9	★83-317-201-019	HOLDER,P.C.B(M3)	*	1
	2-10	★83-317-204-019	LAMP HOUSE	*	1
	2-11	★83-317-660-010	CASE SPACE SHIELD PT(H)	*	1
	2-12	★83-318-625-010	SHIELD SPACE PT(K)		1

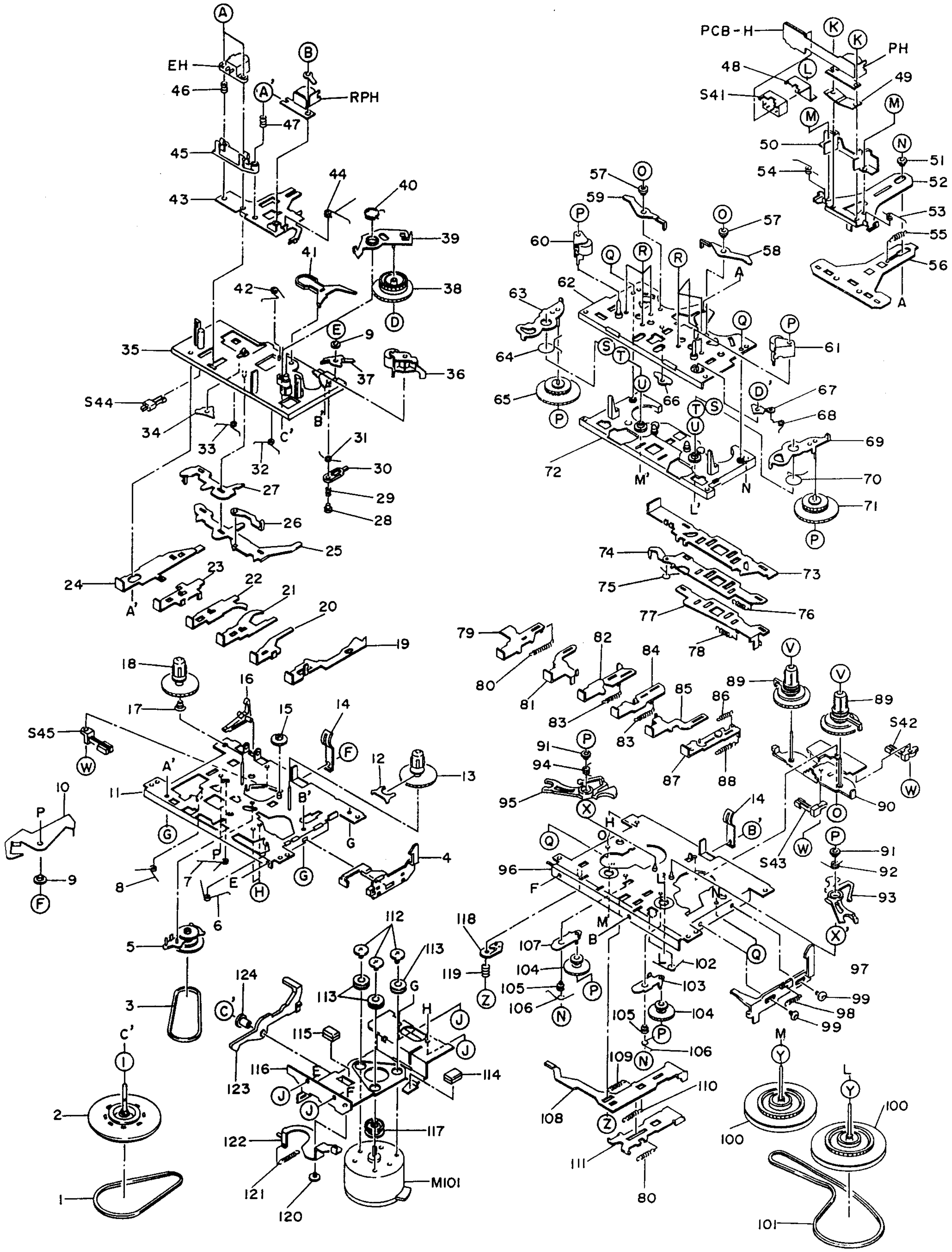
EXPLODED VIEW – 2

REF.NO.	PART NO.	DESCRIPTION
A	87-067-579-010	BVT$_2$+3-8(SLOT)
B	87-067-633-010	BVT$_2$+3-8(CONVEX)
C	87-067-581-010	BVT$_2$+3-15
D	87-571-033-410	VIT+2-4
E	87-081-531-019	QTT+3-6
F	87-561-096-219	VFT$_1$+3-10
G	87-067-566-010	VFTT+3-6
H	87-261-094-210	V+3-6



EXPLODED VIEW – 3 (E1,K)

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-223-000-000	SCREW M2×7.5(⊕ ⊖CAP)	K	S9-999-200-070	SCREW M2×4.5	U	S9-786-000-000	PW 2×3.5×0.3
B	S9-115-000-000	SCREW M2×3(⊕BIND)	L	S9-692-000-000	SCREW M1.7×2.5(CAMERA S TAPPING)	V	S9-888-000-000	PW 1.2×3×0.4 CUT
C	S9-999-030-130	PW 1.45×3.8×0.5 CUT	M	S9-079-000-000	SCREW M2×6(⊕TAMS)	W	S9-181-000-000	SCREW M2×5(⊕C TAPPING)
D	S9-422-000-000	PW 1.2×3.8×0.3 CUT	N	S9-695-000-000	SCREW M1.7×4(CAMERA S TAPPING)	X	S9-999-000-090	PW 3×8.5×0.13
E	S9-999-200-180	SCREW M2×3.5(PS TAPPING)	O	S9-693-000-000	SCREW 1.7×3(CAMERA S TAPPING)	Y	S9-889-000-000	PW 2.1×3×0.3
F	S9-178-000-000	SCREW M2×3(C TAPPING)	P	S9-421-000-000	PW 1.2×3×0.25 CUT	Z	S9-876-000-000	PW 2.1×5×0.5 CUT
G	S9-679-000-000	SCREW M2×5(P TAPPING BIND)	Q	S9-674-000-000	SCREW M2×6(C TAPPING)	A'	S9-922-000-000	SCREW AZIMUTH M2×7
H	S9-999-180-090	SCREW M2×4.5(CAMERA TAPPING)	R	S9-999-130-010	SCREW M1.7×8(CAMERA S TAPPING)	B'	S9-178-000-000	SPECIAL SCREW M2×3
I	S9-786-000-000	PW 2×3.5×0.3	S	S9-999-000-130	PW 1.75×4×0.3	C'	S9-182-000-000	SCREW M2×6(C TAPPING)
J	S9-180-000-000	SCREW M2×5(⊕C TAPPING)	T	S9-999-030-090	PW 1.45×4×0.5 CUT	D'	S9-502-000-000	E RING S2.0

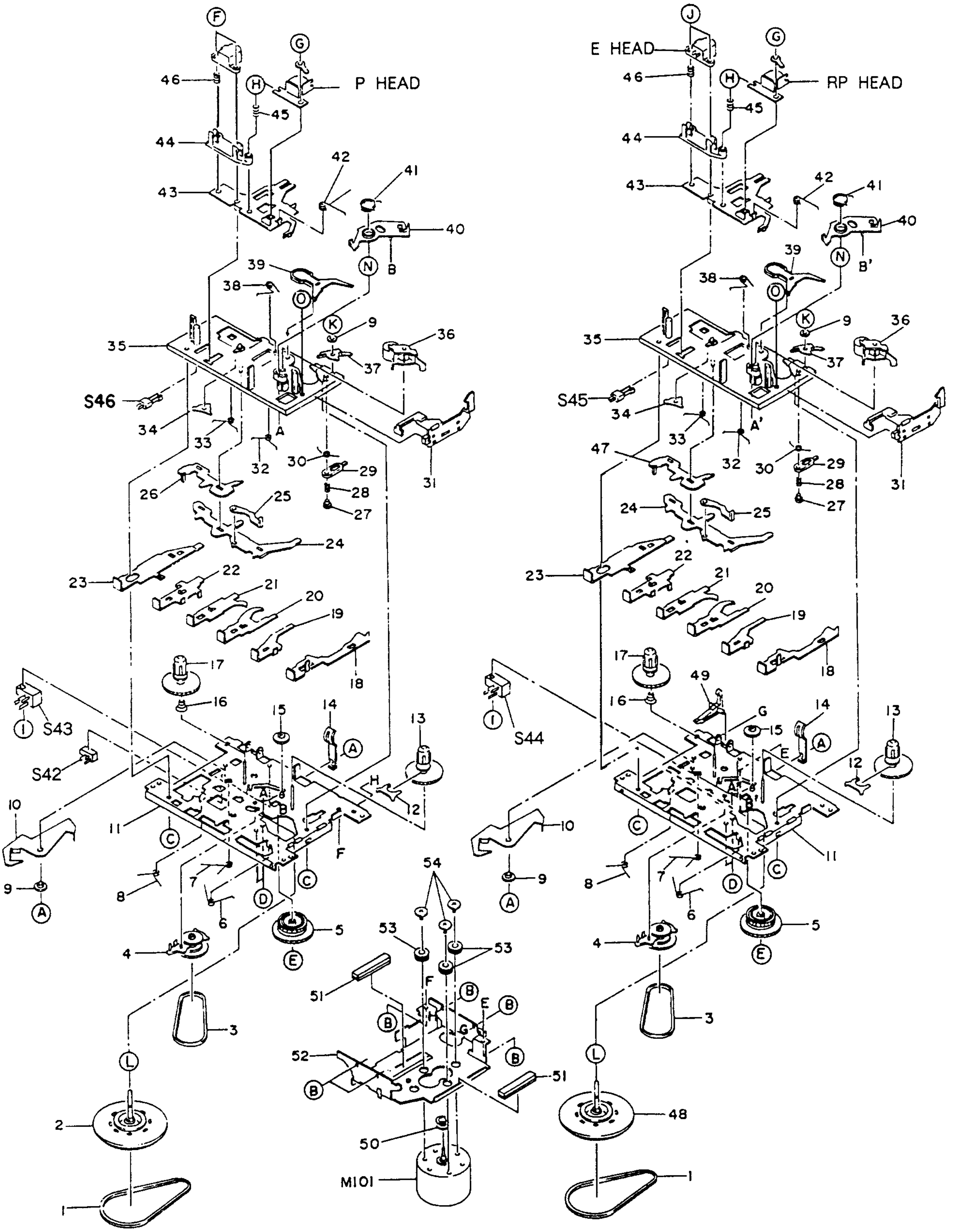


PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	3-1	S1-821-121-730	MAIN BELT		1
	3-2	S1-921-093-050	FLYWHEEL ASSY		1
	3-3	S1-921-070-110	RF BELT		1
	3-4	★S1-921-130-020	EJECT SLIDE LEVER		1
	3-5	★S1-921-073-020	RF CLUTCH ASSY		1
	3-6	★S1-921-140-160	E ACTUATOR SPRING		1
	3-7	★S1-921-140-210	REC BUTTON LEVER SPRING		1
	3-8	★S1-921-140-170	P-SPRING LEVER		1
	3-9	★S1-921-140-370	P ARM COLLAR		2
	3-10	★S1-921-020-010	REC ARM		1
	3-11	---	CHASSIS ASSY		1
	3-12	★S1-921-050-060	SENSOR		1
	3-13	S1-921-053-040	TAKE-UP REEL ASSY		1
	3-14	★S1-829-100-060	PACK SPRING	*	2
	3-15	★S1-821-100-700	FF GEAR		1
	3-16	★S1-821-100-690	RECORD SAFETY LEVER		1
	3-17	★S1-821-100-990	BACK TENSION SPRING		1
	3-18	S1-921-053-040	SUPPLY REEL ASSY		1
	3-19	★S1-921-140-610	PAUSE BUTTON LEVER		1
	3-20	★S1-921-140-660	STOP BUTTON LEVER		1
	3-21	★S1-921-140-250	FF BUTTON LEVER		1
	3-22	★S1-921-140-240	REW BUTTON LEVER		1
	3-23	★S1-921-140-230	PLAY BUTTON LEVER		1
	3-24	★S1-921-140-220	REC BUTTON LEVER		1
	3-25	★S1-921-140-080	PUSH BUTTON ACTUATOR		1
	3-26	★S1-921-140-640	E KICK LEVER		1
	3-27	★S1-921-140-090	SWITCH ACTUATOR		1
	3-28	★S1-921-140-110	PAUSE STOPPER		1
	3-29	★S1-921-140-120	PAUSE LEVER SPRING		1
	3-30	★S1-921-140-120	PAUSE LEVER(E)		1
	3-31	★S1-921-141-3A0	P-SPRING,CONTROL		1
	3-32	★S1-921-140-150	BUTTON LEVER SPRING(B)		1
	3-33	★S1-921-140-140	BUTTON LEVER SPRING(A)		1
	3-34	★S1-921-140-200	PR STOPPER		1
	3-35	★S1-921-143-16W	BASE ASSY		1
	3-36	S1-921-043-040	PINCH ROLLER ARM ASSY		1
	3-37	★S1-921-140-340	P ARM		1
	3-38	★S1-921-260-020	CAM GEAR		1
	3-39	★S1-921-265-020	GEAR PLATE ASSY		1
	3-40	★S1-921-260-050	GEAR PLATE SPRING		1
	3-41	★S1-921-260-4A0	SENSING LEVER		1
	3-42	★S1-921-140-180	M CONTROL SPRING		1
	3-43	★S1-921-030-140	HEAD PANEL		1
	3-44	★S1-921-030-090	P-SPRING,PANEL		1
	3-45	★S1-921-030-6A0	HEAD BASE		1
	3-46	★S1-821-030-080	EH SPRING		1
	3-47	★S1-821-030-070	AZIMUTH SPRING		1
	3-48	★S1-851-160-010	SWITCH BRACKET		1
	3-49	★S1-851-040-050	HEAD SPRING PLATE		1
	3-50	★S1-851-040-520	TAPE GUIDE		1
	3-51	★S1-851-040-040	H.P. COLLAR		1
	3-52	★S1-851-040-010	HEAD PANEL		1
	3-53	★S1-851-040-060	PINCH ROLLER SPRING F		1
	3-54	★S1-851-040-070	PINCH ROLLER SPRING R		1
	3-55	★S1-851-040-090	R.C. PLATE SPRING		1
	3-56	★S1-851-040-020	R.C. PLATE		1
	3-57	★S1-851-180-070	CONTROL ARM COLLAR		2
	3-58	★S1-851-180-050	AUTO CONTROL ARM F		1
	3-59	★S1-851-180-060	AUTO CONTROL ARM R		1
	3-60	S1-851-105-040	PINCH ROLLER R ASSY		1
	3-61	S1-851-095-040	PINCH ROLLER F ASSY		1
	3-62	★S1-851-183-010	SUB CHASSIS ASSY		1
	3-63	★S1-851-063-010	T GEAR ARM R ASSY		1
	3-64	★S1-851-060-030	T GEAR ARM R SPRING		1
	3-65	★S1-851-060-020	T CAM GEAR R		1
	3-66	★S1-851-180-040	RC ARM		1
	3-67	★S1-851-030-010	TURN OVER ARM		1
	3-68	★S1-851-030-020	TURN OVER SPRING		1
	3-69	★S1-851-053-010	T GEAR ARM F ASSY		1
	3-70	★S1-851-050-040	T GEAR ARM F SPRING		1

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	3-71	★S1-851-050-030	T CAM GEAR F		1
	3-72	★S1-851-025-010	BOTTOM BASE ASSY		1
	3-73	★S1-851-020-170	SLIDE PLATE		1
	3-74	★S1-851-023-010	LOCK ACTUATOR		1
	3-75	★S1-851-020-200	LOCK RELEASE SPRING		1
	3-76	★S1-851-020-250	LOCK ACTUATOR SPRING		1
	3-77	★S1-851-023-020	SWITCH ACTUATOR ASSY		1
	3-78	★S1-851-020-760	SWITCH ACTUATOR SPRING		1
	3-79	★S1-851-023-090	MODE BUTTON LEVER ASSY		1
	3-80	★S1-851-020-240	PROG BUTTON LEVER SPRING		2
	3-81	★S1-851-020-320	PLAY BUTTON LEVER		1
	3-82	★S1-851-020-350	FF BUTTON LEVER R		1
	3-83	★S1-851-020-240	FF BUTTON LEVER SPRING		2
	3-84	★S1-851-020-340	FF BUTTON LEVER F		1
	3-85	★S1-851-020-310	STOP BUTTON LEVER		1
	3-86	★S1-851-020-270	PULL ARM SPRING		1
	3-87	★S1-851-023-040	PROG BUTTON LEVER ASSY		1
	3-88	★S1-851-020-220	BUTTON LEVER SPRING		1
	3-89	S1-851-115-010	REEL ASSY		2
	3-90	★S1-851-113-010	REEL PLATE ASSY		1
	3-91	★S1-851-200-050	SPRING,STOPPER		2
	3-92	★S1-851-200-030	AUTO LEVER R SPRING		1
	3-93	★S1-851-200-010	AUTO LEVER F		1
	3-94	★S1-851-200-040	AUTO LEVER F SPRING		1
	3-95	★S1-851-200-020	AUTO LEVER R		1
	3-96	---	CHASSIS ASSY		1
	3-97	★S1-851-170-030	EJECT SLIDE LEVER		1
	3-98	★S1-851-170-020	EJECT SLIDE LEVER SPRING		1
	3-99	★S1-821-120-230	P.K. COLLAR SCREW A		2
	3-100	S1-851-125-050	FLYWHEEL ASSY		2
	3-101	S1-821-121-420	MAIN BELT		1
	3-102	★S1-851-020-210	STOP BUTTON LEVER SPRING		1
	3-103	★S1-851-073-010	FF GEAR ARM F ASSY		1
	3-104	★S1-851-070-030	FF GEAR		2
	3-105	★S1-851-070-050	FF GEAR ARM COLLAR		2
	3-106	★S1-851-070-040	FF GEAR ARM SPRING F		2
	3-107	★S1-851-083-010	FF GEAR ARM R ASSY		1
	3-108	★S1-851-040-080	RELEASE PLATE		1
	3-109	★S1-851-020-420	BUTTON LEVER SPRING P		1
	3-110	★S1-851-040-100	R.C. SPRING		1
	3-111	★S1-851-160-020	FF SW PLATE		1
	3-112	★S1-851-140-180	MOTOR COLLAR SCREW		3
	3-113	★S1-821-120-660	MOTOR RUBBER		3
	3-114	★S1-821-121-090	ANTI-VIBRATION FELT MAT		1
	3-115	★S1-800-100-840	ANTI-VIBRATION FELT MAT		1
	3-116	★S1-851-140-070	MOTOR,BRACKET		1
	3-117	★S1-851-140-300	MOTOR,PULLEY		1
	3-118	★S1-821-010-150	PAUSE LEVER(U,C,K)		1
	3-119	★S1-821-010-160	PAUSE LEVER SPRING(U,C,K)		1
	3-120	★S1-821-120-230	P.K. COLLAR SCREW A(H)		1
	3-121	★S1-851-140-040	P.K. LEVER SPRING(H)		1
	3-122	★S1-851-140-060	P.K. LEVER A(H)		1
	3-123	★S1-851-120-250	P.K. LEVER B(H)		1
	3-124	★S1-821-120-650	COLLAR SCREW B		1

EXPLODED VIEW – 4 (E,Z)

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-179-000-000	SCREW M2×3(C TAPPING)	F	S9-821-000-000	SCREW M2×8(⊕ ⊖CAP)	K	S9-999-200-180	SCREW M2×3.5(P TAPPING)
B	S9-180-000-000	SCREW M2×4(C TAPPING)	G	S9-115-000-000	SCREW M2×3(⊕BIND)	L	S9-182-000-000	SCREW M2×6(C TAPPING)
C	S9-679-000-000	SCREW M2×5(P TAPPING BIND)	H	S9-922-000-000	SCREW AZIMUTH M2×7	M	S9-422-000-000	PW 1.2×3.8×0.3 CUT
D	S9-999-180-090	SCREW M2×4.5(TAPPING FOR CAMERA)	I	S9-181-000-000	SCREW M2×7(C TAPPING)	N	S9-999-030-130	PW 1.45×3.8×0.5 CUT
E	S9-004-000-000	SCREW M2×8	J	S9-223-000-000	SCREW M2×7.5(⊕ ⊖CAP)	O	S9-786-000-000	PW 2×3.5×0.3



P HEAD
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RP HEAD
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S46
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PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	4-1	S1-821-120-220	MAIN BELT		2
	4-2	S1-921-093-050	FLYWHEEL ASSY		1
	4-3	S1-921-070-030	RF BELT		2
	4-4	★S1-921-073-020	RF CLUTCH ASSY		2
	4-5	★S1-921-260-020	CAM GEAR		2
	4-6	★S1-921-140-160	E-SPRING,ACTUATOR		2
	4-7	★S1-921-140-210	REC BUTTON LEVER SPRING		2
	4-8	★S1-921-140-170	P-SPRING,LEVER S		2
	4-9	★S1-921-140-370	P ARM COLLAR		4
	4-10	★S1-921-020-010	REC ARM		2
	4-11	---	CHASSIS ASSY		2
	4-12	★S1-921-050-060	SENSOR		2
	4-13	S1-921-053-010	TAKE-UP REEL ASSY		2
	4-14	★S1-821-100-990	PACK SPRING		2
	4-15	★S1-821-100-700	FF GEAR		2
	4-16	★S1-829-100-100	BACK TENSION SPRING		2
	4-17	S1-921-053-020	SUPPLY REEL ASSY		2
	4-18	★S1-921-140-270	PAUSE BUTTON LEVER		2
	4-19	★S1-921-140-260	STOP BUTTON LEVER		2
	4-20	★S1-921-140-250	FF BUTTON LEVER		2
	4-21	★S1-921-140-240	REW BUTTON LEVER		2
	4-22	★S1-921-140-230	PLAY BUTTON LEVER		2
	4-23	★S1-921-140-220	REC BUTTON LEVER		2
	4-24	★S1-921-140-080	PUSH BUTTON ACTUATOR		2
	4-25	★S1-821-011-590	E KICK LEVER		2
	4-26	★S1-921-140-400	SWITCH ACTUATOR		1
	4-27	★S1-921-140-110	PAUSE STOPPER		2
	4-28	★S1-921-140-120	PAUSE LEVER SPRING		2
	4-29	★S1-921-141-0A0	PAUSE LEVER		2
	4-30	★S1-921-140-130	P-SPRING,CONTROL		2
	4-31	★S1-921-130-020	EJECT SLIDE LEVER		2
	4-32	★S1-921-140-150	BUTTON LEVER SPRING(B)		2
	4-33	★S1-921-140-140	BUTTON LEVER SPRING(A)		2
	4-34	★S1-921-140-200	PR STOPPER		2
	4-35	★S1-921-143-010	BASE ASSY		2
	4-36	S1-921-043-010	PINCH ROLLER ARM ASSY		2
	4-37	★S1-921-140-340	P ARM		2
	4-38	★S1-921-140-180	M CONTROL SPRING		2
	4-39	★S1-921-260-040	SENSING LEVER		2
	4-40	★S1-921-265-010	GEAR PLATE ASSY		2
	4-41	★S1-921-260-050	GEAR PLATE SPRING		2
	4-42	★S1-921-030-090	P-SPRING,PANEL		2
	4-43	★S1-921-030-020	HEAD PANEL		2
	4-44	★S1-921-030-060	HEAD BASE		2
	4-45	★S1-821-030-070	AZIMUTH SPRING		2
	4-46	★S1-821-030-080	EH SPRING		2
	4-47	★S1-921-140-080	SWITCH ACTUATOR		1
	4-48	S1-921-093-110	FLYWHEEL ASSY		1
	4-49	★S1-821-100-690	RECORD SAFETY LEVER		1
	4-50	★S1-921-120-130	MOTOR PULLEY		1
	4-51	★S1-921-120-120	ANT VIBRATION FELT MAT		2
	4-52	★S1-921-120-110	MOTOR BRACKET		1
	4-53	★S1-820-130-060	MOTOR RUBBER		3
	4-54	★S1-821-120-020	MOTOR COLLAR SCREW		3

■ SPEAKER LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1	★83-324-001-010	CABINET(705)		2
	2	★83-323-001-010	CABINET R(707)		1
	3	★83-323-002-010	CABINET L(707)		1
	4	★83-323-003-010	CABINET(750)		2
	5	★83-324-002-010	PANEL WOOFER(705)		2
	6	★83-323-005-010	PANEL WOOFER(707,750)		2
	7	★83-323-006-010	PANEL TWEETER		2
	8	★83-323-007-010	PANEL S TWEETER(707)		2
	9	★83-323-008-010	PANEL DUCT(750)		2
	10	★83-323-009-010	DUCT(707)		2
	11	★83-102-018-010	FASTENER F(707)		2
	12	★83-324-004-010	GRILL FRAME ASSY(705)		2
	13	★83-323-010-010	GRILL FRAME ASSY(707)		2
	14	★83-315-003-010	FRONT GRILL ASSY(750)		2
	15	83-324-609-010	SPEAKER WOOFER(705)		2
	16	81-654-601-010	SPEAKER WOOFER(707)		2
	17	83-323-601-010	SPEAKER WOOFER(750)		2
	18	83-324-605-010	SPEAKER TWEETER(750)		2
	19	83-308-603-010	SPEAKER TWEETER(707)		2
	20	83-323-603-010	SPEAKER TWEETER(750)		2
	21	81-654-605-010	TWEETER CERAMIC(707)		2
	22	★83-082-041-010	CORD BUSHING		2
	23	★83-096-614-010	SPEAKER CORD		2

■ ACCESSORIES／PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1	★83-343-916-019	INSTRUCTION BOOKLET,E/Z S (E,Z)	*	1
	2	★83-343-908-018	INSTRUCTION BOOKLET,E1(E1)	*	1
	3	★83-343-905-018	INSTRUCTION BOOKLET,K(K)	*	1
	4	★81-653-647-010	AM-LOOP ANT(6T)CON(E,E1,K)		1
	5	★81-653-645-010	AM-LOOP ANT(6T)NC(Z)		1
	6	★81-748-632-010	FM FEEDER ANT,N(E,E1,K)		1
	7	★83-335-010-019	RC-T75FYBN		1